Hughenden Village to Abbey Barn Lane

Feasibility report on a walking and cycling route from Hughenden village centre to Abbey Barn Lane via High Wycombe Railway Station







October 2020

Introduction

Reducing the nation's dependency on the car as a means of transport has long been recognised as a key component in the drive to reduce pollution, and making available convenient, safe, and attractive routes to encourage walking and cycling as an alternative to the car is an important contribution to wider government policy on the reduction of pollution.

Also recognised widely are the benefits to personal health and well-being that come from exercise, and in turn the savings to public health system that accrue from a more health society. Cycling and walking are acknowledged as "easy wins" in struggle to improve public health, and providing facilities to encourage more exercise are important steps in delivering that strategy.

Buckinghamshire Council and before it Buckinghamshire County Council and Wycombe District Council have long since made policy provision for encouraging cycling and walking, and with particular with reference to this project, protection of the former Bourne End to High Wycombe railway line for off-road transport and leisure

The route discussed in this report seeks to deliver on three of these aims:

- An alternative for commuters travelling to the town centre and the station
- An attractive facility for leisure use
- In conjunction with a similar, more advanced cycling project, completion of a long-awaited use link between High Wycombe and Bourne End stations

Background

High Wycombe is not well provided with suitable cycling facilities – the geography of the town does not lend itself to casual cycling, unless the preferred route is along the valley floor, and so the demand for them is subdued compared to other similarly sized towns. This is likely change with the advent of affordable electric cycles and the increasing popularity of e-scooters and the like – the hills are unlikely to be a problem to the coming generation of cyclists.

The aims of this proposed route are:

- To make provision for commuter cycling to and from High Wycombe Railway station to reduce the peak-hour traffic congestion around the station;
- In particular, to provide cycling access for the planned construction of new housing in the Abbey Barn Farm area;
- To link with and continue the Bourne End to High Wycombe cycle route that is already in advanced planning, thus extending the commuter links to Bourne End Station, and the GWR rails services London and the west country
- To encourage and provide an easy route for "day-trippers" to the Chilterns to arrive by train and easily and safely cycle to Hughenden and beyond.

Design considerations

Cycling nationally has seen a significant growth popularity in the recent past – promoted by Central Government transport policy and subsidised cycle purchase scheme, however with that growth has been an increase in road traffic accidents involving cyclists, and anecdotally it is apparent that fear of cycling amongst cars is a significant demotivator to many potential cyclists, and experience elsewhere in the UK and aboard has shown that segregating cars and cycles results in a significant increase in cycling, even where the segregation is partial or not continuous.

There is considerable technical and design advice available from SUSTRANS and the Department for Transport's, and a general principle in formulating the route is that whenever practical compliance with the available guidance should be achieved

The study assumed that the cycleway should be designed for the "timid cyclist", ie one who has hither-to not cycled regularly because of a lack of confidence, or concern about cycling amongst motor traffic. Therefore, the route should, in so far as is practical, be off-road, and where that isn't possible it should follow quiet back-streets that have little by way of through traffic. And where there was no option but to follow a busy, the cycle and motor traffic should be physically separated.

It was acknowledged that inserting a dedicated cycling provision into an existing urban environment will be problematic and expensive and that where the existing street network is used, doing so may have an adverse effect on traffic flow or parking on that road. There is a

balance of benefit and disadvantage that had to be considered when selecting the route.

Summary

The purpose of this study was to determine whether the there is a feasible route between Hughenden Village and Abbey Barn Lane, via High Wycombe Station.

- The recommended route starts at Hughenden Village centre and initially follows existing tracks of footpaths across or alongside pasture land.
- Entry to the urban area of High Wycombe is through Hughenden Park, a public open space.
- The route then follows and unites some otherwise disjointed roadside cycleways.
- Through the town centre the route joins with the existing road network, and some modification will be required to allow for it
- Access to and from the station is complicated by the existing layout and topography and some modification will be required.
- The route follows a widened Birdcage Walk before re-joining the highway and utilising Queen's Road.
- The London Road was seen as a major obstacle to cyclists, so the route follows a slightly complicated detour to enable access onto the path of the disused Bourne End railway branch line, which it follows thereafter until its destination at the bottom of Abbey Barn Lane.
- A new bridge is proposed to Cross London Road, replacing a long since demolished railway bridge. An expensive item perhaps,

- but key to uniting both sides of the valley and creating a cycleway that fulfils it aims.
- The route joins a soon to be constructed section of cycle path on the Bassetsbury Embankment, before re-joining the highway at Bassetsbury Lane.
- It continues for a short distance before crossing Back stream on a new bridge, ending at the bottom of Abbey Barn Lane, at which point it joins with another section of the route, the subject of another feasibility study

The recommended route is neither the most direct nor is it likely to be the cheapest and least problematic to construct, but it is the one that best fits the design brief considering the physical and land ownership constraints encountered along the way.

The recommended route has some significant engineering challenges, in particular High Wycombe Station and Bird Cage Walk, the railway embankment at the rear of Queen's Road. And the London Road Bridge.

The route makes considerable use of the existing road network. This assumes that modifications to these to make them cycling - friendly can be achieved. And because they tend to be quieter roads, that also tend to be of a poorer quality and most will require resurfacing to make them suitable.

For the most part the route is on land that the Council owns, controls, or has influence over, however some key parts rely on successfully negotiating access over private land.

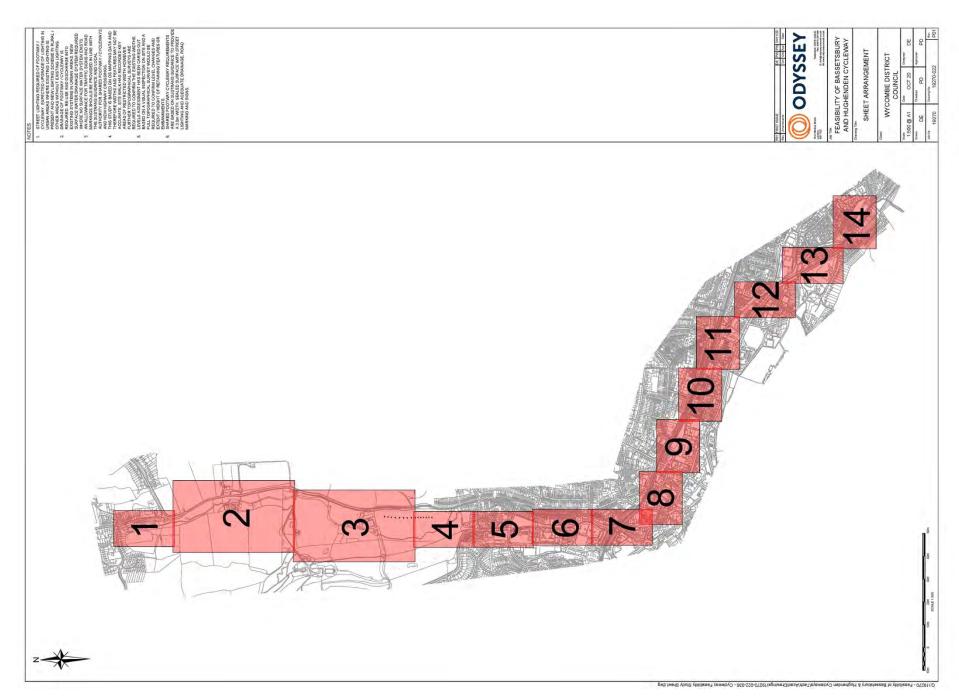
Recommendations

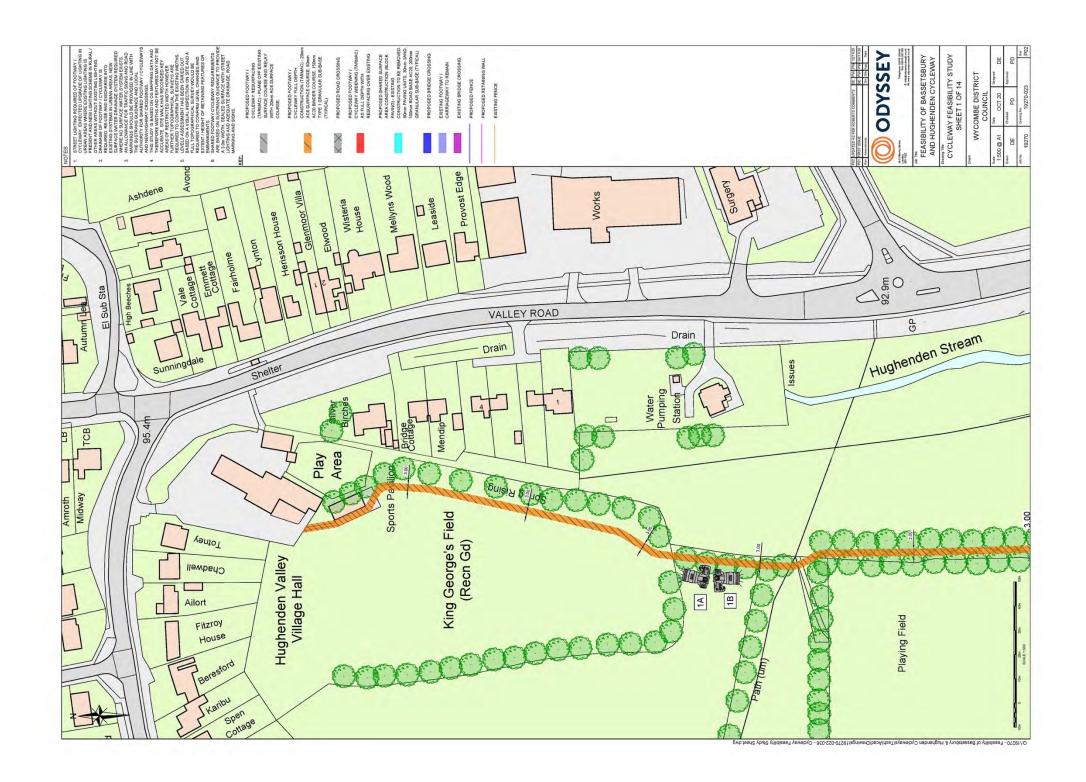
This report was not intended to provide a costbenefit analysis of the route, rather it was intended to recommend a suitable route and identify the problems that might be encountered along the way. Inevitable cost is an important consideration and indeed "problem" - inserting a cycleway into and existing urban context is bound to be expensive. Whether that expense is warranted is a question that should be considered.

Recommendation 1 – carry out a cost benefit analysis of the route, or sections of it to establish if the utility of the route is proportionate to the cost.

The acquisition of land, or agreeing terms for access over it is critical to the success of the project. And although initial enquiries to land owners have been broadly positive, it is important that these are followed up

Recommendation 2 – negotiate with the landowners to secure access for the route.





Map 1- Hughenden Village

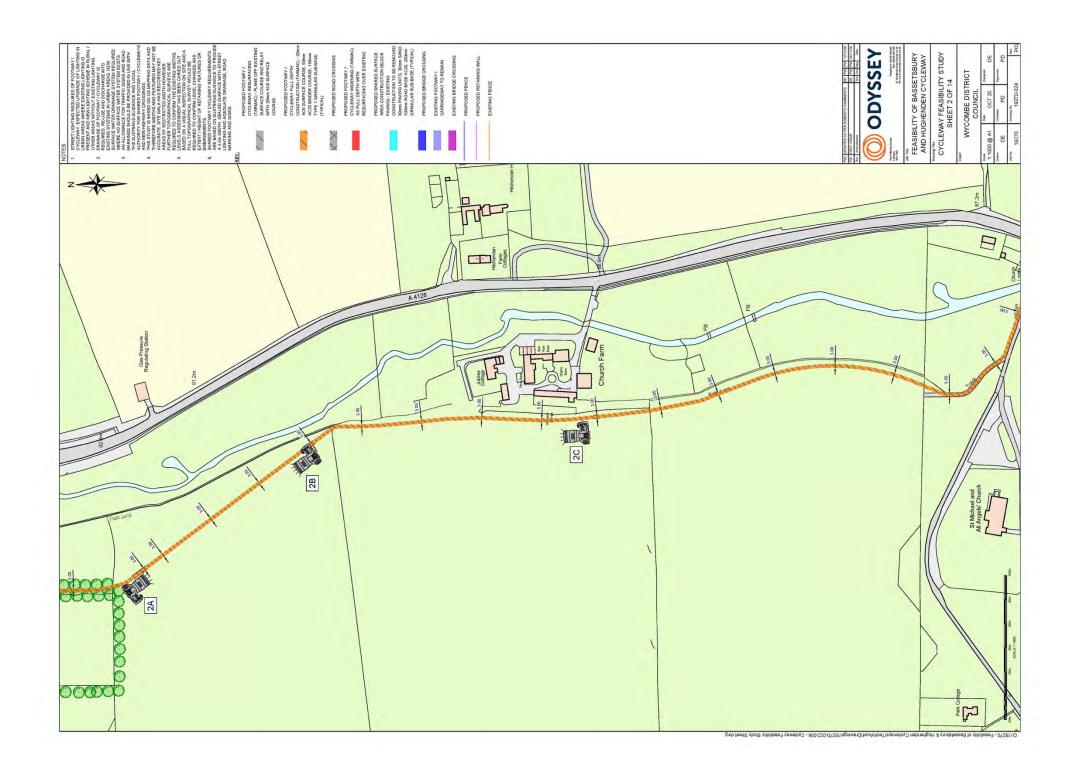
The proposed route starts at the entrance to King George's Field Recreation Grounds at the rear of the Hughenden Village Hall. It skirts the perimeter of the field, leaving on the line of and existing footpath through a coppice, and thereafter following a tree line alongside the sports field



1b - Existing footpath south of King George's Field (facing south)



1a – Existing footpath south of King George's Field (facing north)



Map 2 – Hughenden Farm

The route follows an established walking route, first across, and then then at the edge of open pastureland before joining alongside the access road to Hughenden Manor.



2a - Unmarked path over the pasture

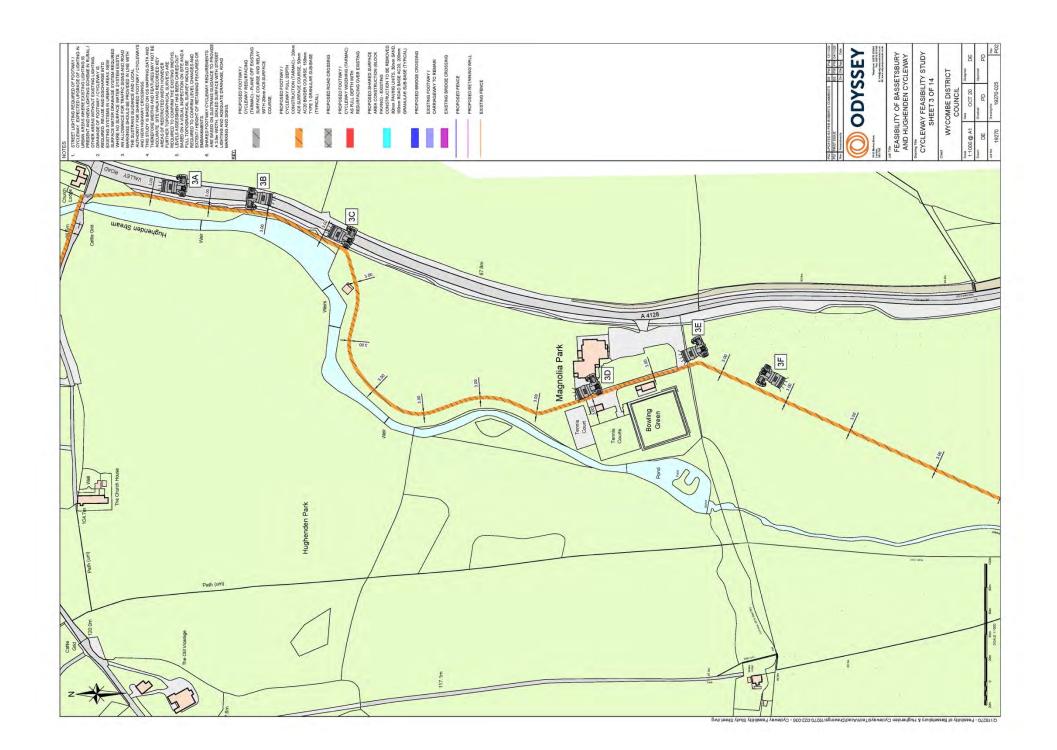
The route passes across several fence lines — these currently have gates that would be unsuitable for cycling so would need modifying. Alternatively, where the route follows along the field end a new fence could be erected to enclose the cycle route, so for the most part eliminating the need for gates



2b – Unmarked path over the pasture



2a – Right of way alongside the pasture fenceline



Map 3 – Valley Road and Magnolia Park

The route follows alongside the drive to the Manor and crosses Hughenden Stream. The existing bridge has cattle grid so is unsuitable for cycling, so a new bridge and stock control mechanism would be needed.

The shortest and most appropriate route from this point would to follow an existing track way towards the Council-owned Hughenden Park, however this route is on land owned by the National Trust, the Trust's local managers are unwilling to permit cycling on this part of their land.

An alternative route, and that shown on the map, is a road-side path, following the A4128 Hughenden Valley Road. For the most part there is ample width for a shared cycling / walking path, there are several pinch points where the available space narrows, or to avoid roadside trees - these are short and infrequent and should not pose a significant problem.



3a - Entrance to Hughenden Manor grounds



3b - Valley Road side



3c - Valley Road

The route then turns from the highway onto the grounds of Magnolia Park and follows the edge of the sports field before passing alongside the sports centre and then entering Hugenden Park public open space.



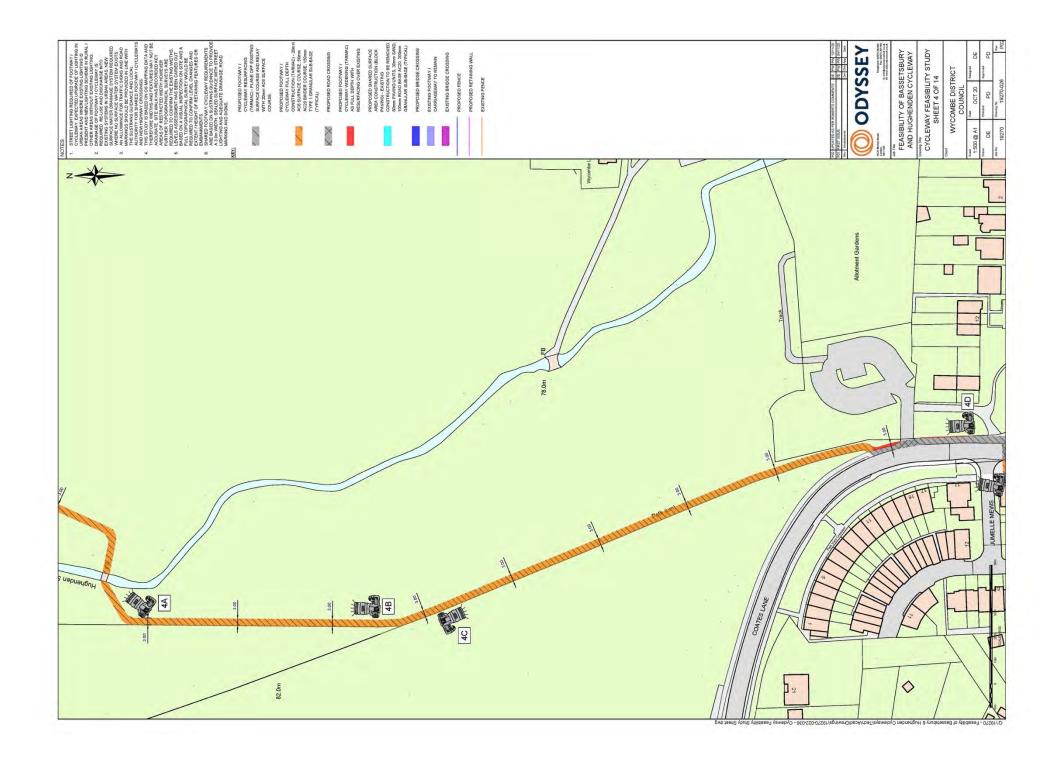
3d – Magnolia Park



3e – Entrance into Hughenden Park from Magnolia Park



3f - Hughenden Park



Map 4 – Hughenden Park

4.1 The route descends across the park towards the Hughenden Stream. There is an existing foot bridge crossing the stream, this is badly worn and will require replacing.



4a – Existing footbridge over the Hughenden Stream

The route then ascends the slope utilising and existing plateau in the land form, and joins old carriage drive that once served Hughenden manor.

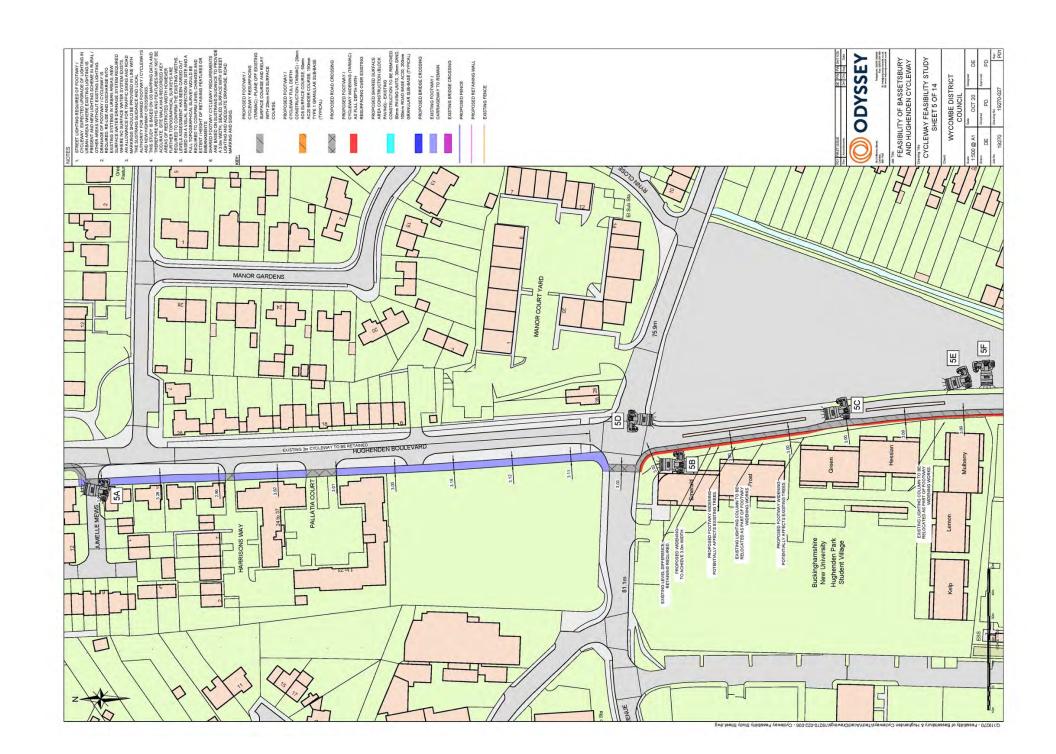


4b - Hughenden Park above the bridge



4c – The route of the disused Hughenden Manor carriage drive

The Carriage drive joins the public highway at Coates Lane, the proposed route crosses Coates Lane to connect to a newly created roadside combined footpath and cycleway.



Map 5 - Hughenden Boulevard

5.1 The route follows the existing shared cycle / pedestrian path on the western side of Hughenden Boulevard to the signal—controlled junction with Hughenden Avenue. This part of the route was recently constructed as a shared surface and requires no additional work or modification.



5a - Existing shared surface



5b – Existing toucan crossing at Hughenden Avenue

- 5.2 South of Hughenden Avenue the existing road layout is problematic for either shared on-road, or shared off road use:
- The existing footpath on the western side is in places only 2m wide, and further restricted by traffic light poles and street lighting columns.
- On the eastern side the sealed footway extends for approximately 100 metres before becoming grass verge.
- The carriageway is divided into opposite lanes with raised but low-level central island and the lane width between the kerb and the central island is insufficient for vehicles to safely pass a cycle.



5c - narrow lane width



5d – Narrow pavement further restricted by traffic light posts

- 5.3 There is some scope for widening of the sealed pavement on the western side of the road but this will mean the loss of some grass verge and several trees within it, along with the construction of some low retaining walls to address level differences between the path and verge. At some points, there is not sufficient roadside land available to widen the footpath without further land being acquired from the road fronting properties
- 5.4 On the eastern side of the road the verge is, for some of its length, grass but trees

within this part restrict the space available for adding a sealed pavement.

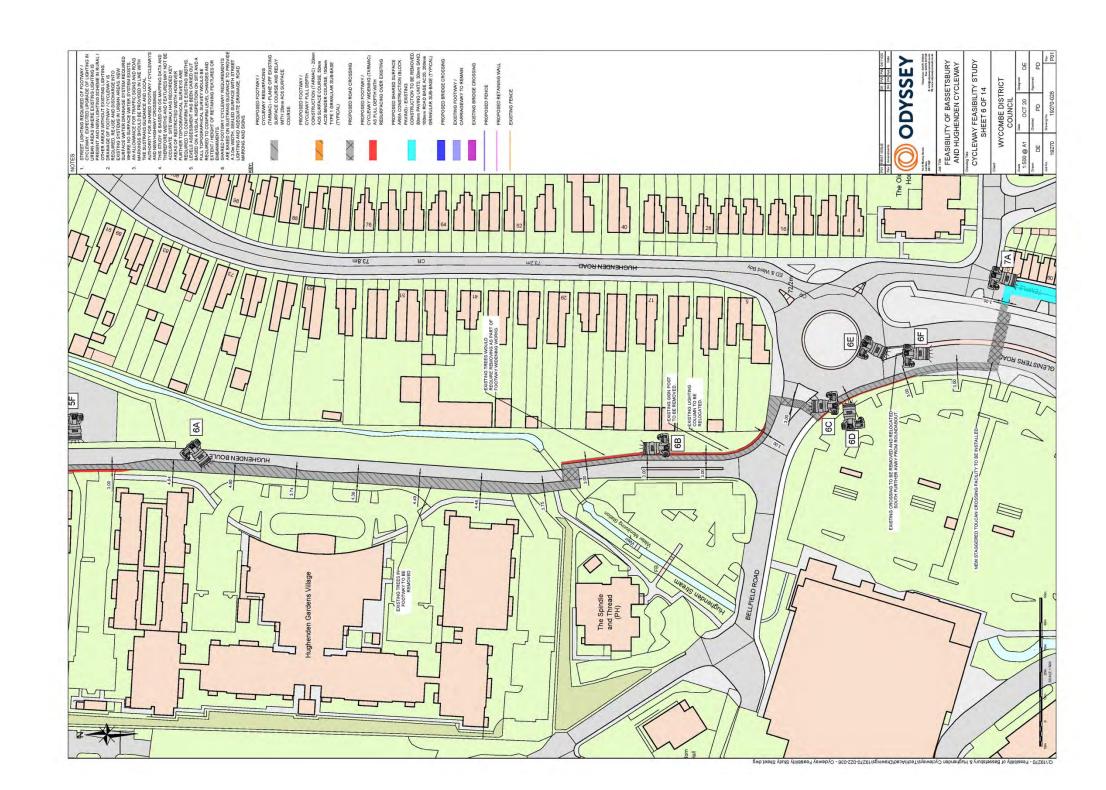


5e – 2m wide footway and grass verge with trees restricting width increase



5f Metal fence restricting the pavement width





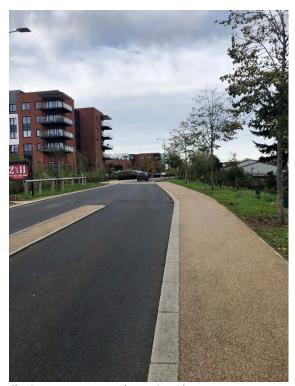
Map 6 – Hughenden Boulevard (cont.) & Glenisters Road roundabout

- 6.1 The route continues along the eastern side of Hughenden Boulevard before crossing to the western side and then across Glenisters Road and a replacement crossing immediately south of the existing roundabout.
- 6.2 The footpath in front of the Hughenden Gardens village is, for the most part between 3.75m and 4.5m wide, however planted centrally within its width are several pavement trees. While the effect of these is to narrow the useable width of the footpath to approximately 1.8 metres, this should not be a significant hindrance to cyclists.



6a – Pavement restricted by tree placement

6.3 There is no footpath alongside the Spindle & Thread public house, nor room for one, so the cycle route must cross the road and join the eastern footpath. As with the pavement further north, this part is narrow and will require widening, necessitating the loss of some grass verge, sapling trees within it, and the repositioning of a light column and a sign board.



6b - Pavement narrow and swapping sides



6c - Narrow pavement further restricted by street furniture

6.4 The Glenisters Road roundabout is a busy dual-lane roadway, and in its current form, hostile to cyclists. The proposed changes include:

- creation of a cycle crossing on the Bellfield road entry / exit;
- removal of the existing pedestrian crossing and it's replacement with a signalcontrolled staggered toucan crossing approximately 40 metres south of the roundabout;
- widening of the footway in front of the Morrisons' car park either by narrowing the carriage way or acquiring land from Morrisons and repositioning the boundary wall.



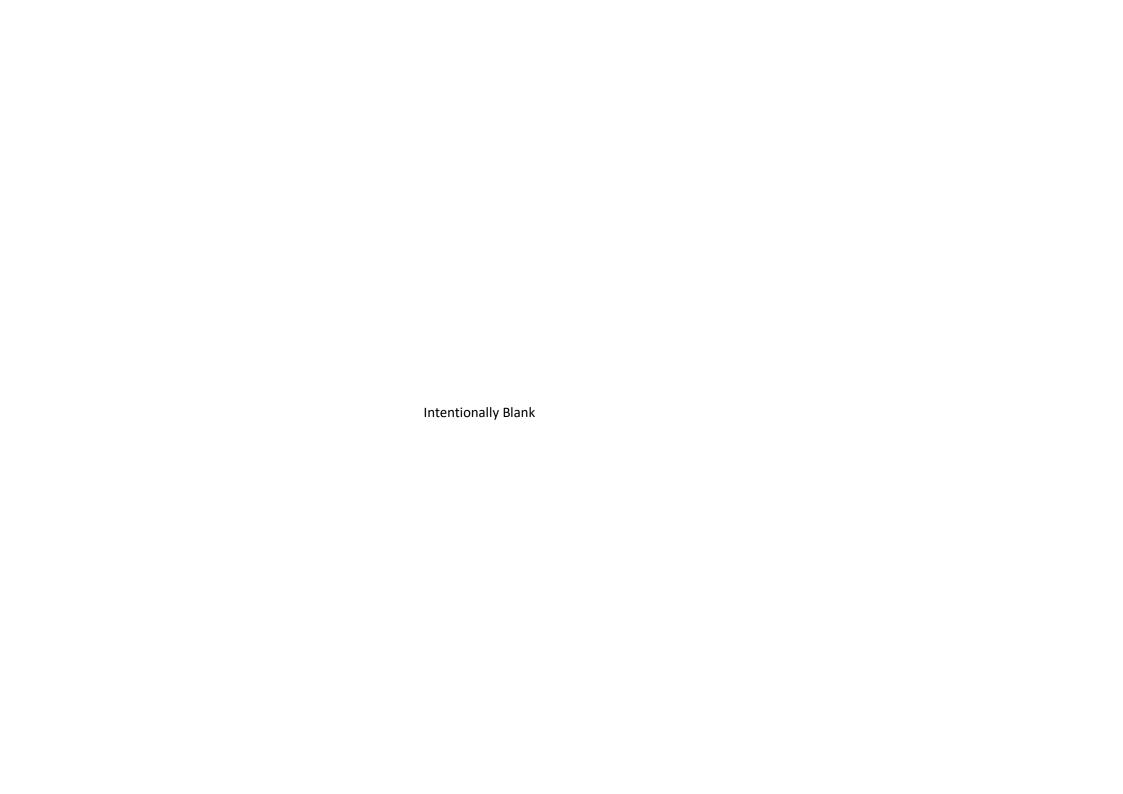
6d – Glensiters Road roundabout

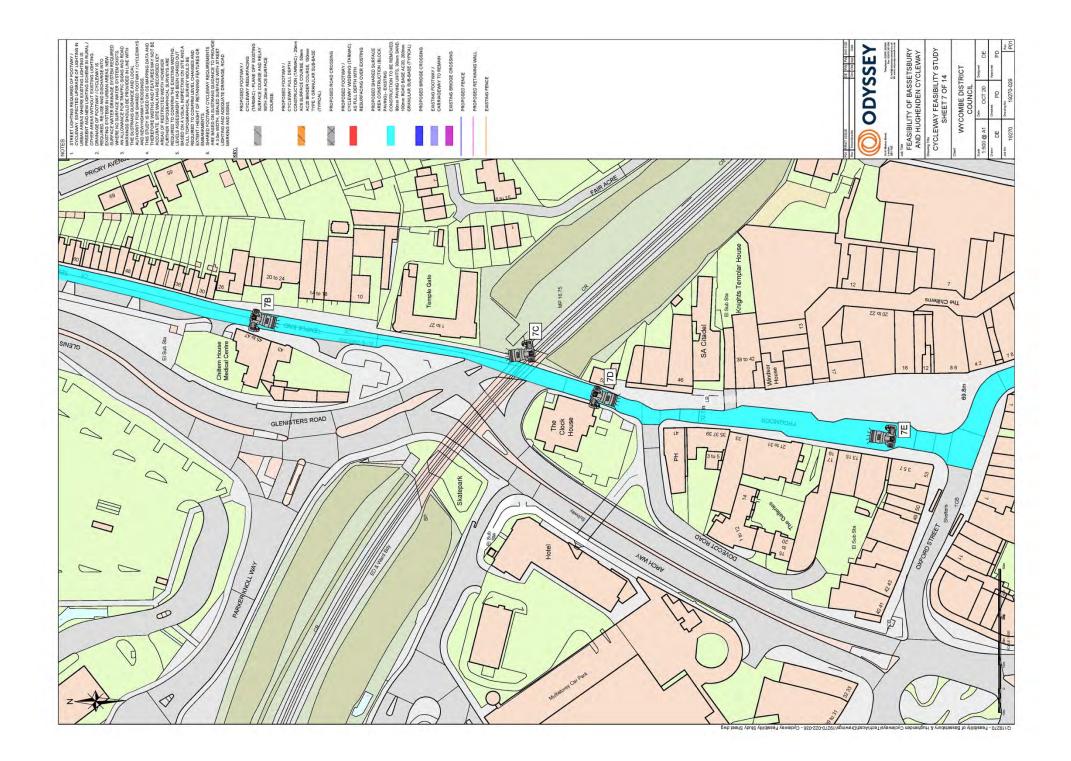


6e – Glensiters Road pavement width restricted by wall in front of Morrisons' carpark. also crossing to be relocated



6f – Glensiters Road, location for new toucan crossing





Map 7 - Temple End and Frogmore

- 7.1 The proposed route joins the road and continues as a shared car / cycle route along Temple end and Frogmore, and then into Church Street.
- 7.7 Both Temple End and Frogmore are for the most part access only roads, and so relatively free of motor traffic, and this route already has cycle-friendly features. However, the junctions with Benjamin Road and Glenisters Road are problematic.
- 7.3 Benjamin Road is a local "rat run" for traffic wanting to travel across the town while avoiding the Abbey Way gyratory system, so safely integrating a cycleway at this junction would be difficult. This may be overcome by joining the cycle route to Temple End south of the Roberts Road Junction, but this may be at the cost of several established roadside trees and one, possibly two kerbside parking spaces.



7a - Temple End Junction with Roberts Road



7b - Temple End

7.4 Glenisters Road joins with Temple End by way of a slip road that meets Temple End at an oblique angle. The geometry of the junction is such that there are no inherent features to slow vehicles joining from Glenisters Road, and because of the angle of the junction seeing cycles and other traffic southbound on Temple End is problematic. Consequently this is currently a dangerous junction for cycles, but it may be improved by altering the layout of the Glenisters Road slip road so that it joins Temple End at a shallower angle, thus naturally slowing the traffic and improving visibility for drivers using the junction.



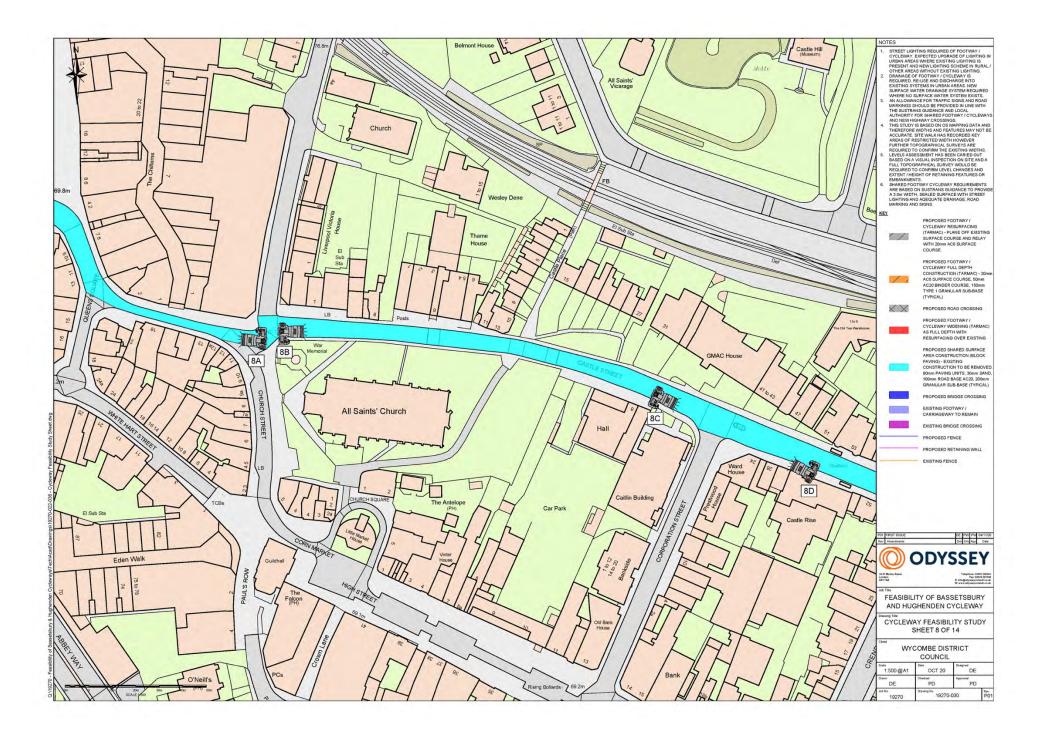
7c Glennisters Road and Temple End junction



7d – Frogmore



7e - Frogmore



Map 8 - Church Street and Castle Street

- 8.1 The route continues as a shared onroad route along on Church Street and Castle Street.
- 8.2 Church Street has little through traffic, its main use is for vehicles serving the town centre shops, and buses. It is of restricted width and for a 30m length there is a single way alternate traffic restriction, however there may be room to allow for a dedicated and cycle lane which would permit cycle traffic in both directions.



8a - Church Street single alternate way section

8.8 Castle Street, in its current form, is not an ideal route for cycles, but there is no practical alternative. It is a relatively busy

road, a principal bus route, and kerbside parking along part of its length narrows it to a single carriageway frequently resulting in congestion. Eliminating the parking would remove the width restriction, however it is already frequently the case that cars park on the existing yellow lines and would probably continue to do so, so it would be desirable to create a dedicated cycle lane physically separated from the roadway, either by widening the pavement, or inserting a secondary kerb or other barrier so as ensure that cars do not block the route.



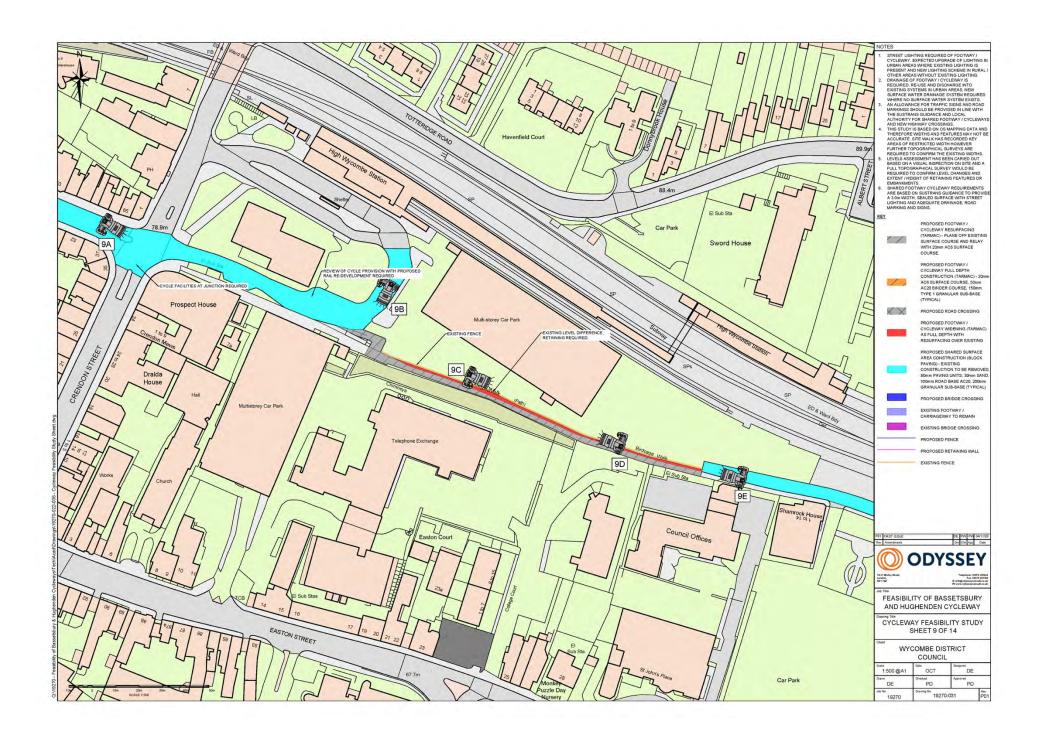
8b – Castle Street single at the junction with Church Street



8b - Castle Street looking towards the station



8b - Castle Street looking towards the Church



Map 9 – Crendon Street, High Wycombe Station and Birdcage Walk

- 9.1 The route crosses Crendon Street and joins the station forecourt, before continuing along Birdcage Walk and then onto Station Road.
- 9.2 The intention is to enter the station alongside the existing pedestrian entrance to the station forecourt utilising land alongside the existing footpath and land alongside it. This may require modification of the Crendon Street traffic lights to create a cycles only crossing of Crendon Street.



9a – Castle and Crendon Street junction

9.3 The route leaves the station forecourt along Birdcage Walk. There is a significant level difference between the forecourt and the Birdcage Walk, so a ramp will be required to connect the two. Alternatively the existing disabled ramp could be modified to make it suitable also for cycles.



9b – level change between Birdcage walk and the station

9.4 Birdcage Walk is an adopted public footpath, and in its current form unsuitable for cycles and pedestrians because it is too narrow. Widening it to the south is not practical because of a significant change in levels, however to the north (station) side there is space available. This would involve acquisition of land from Network Rail and Chiltern Rail, and some reconfiguring of the station parking (although without a reduction in the number of parking spaces available), along with work to make up the levels difference between Birdcage Walk and the parking court.



9c - Station parking adjacent to Birdcage Walk

9.5 Chiltern Rail (lessees) and Network Rail (freeholders) of the land have both been consulted and are keen to improve cycle access to the station and indicated support in principle for changes proposed.

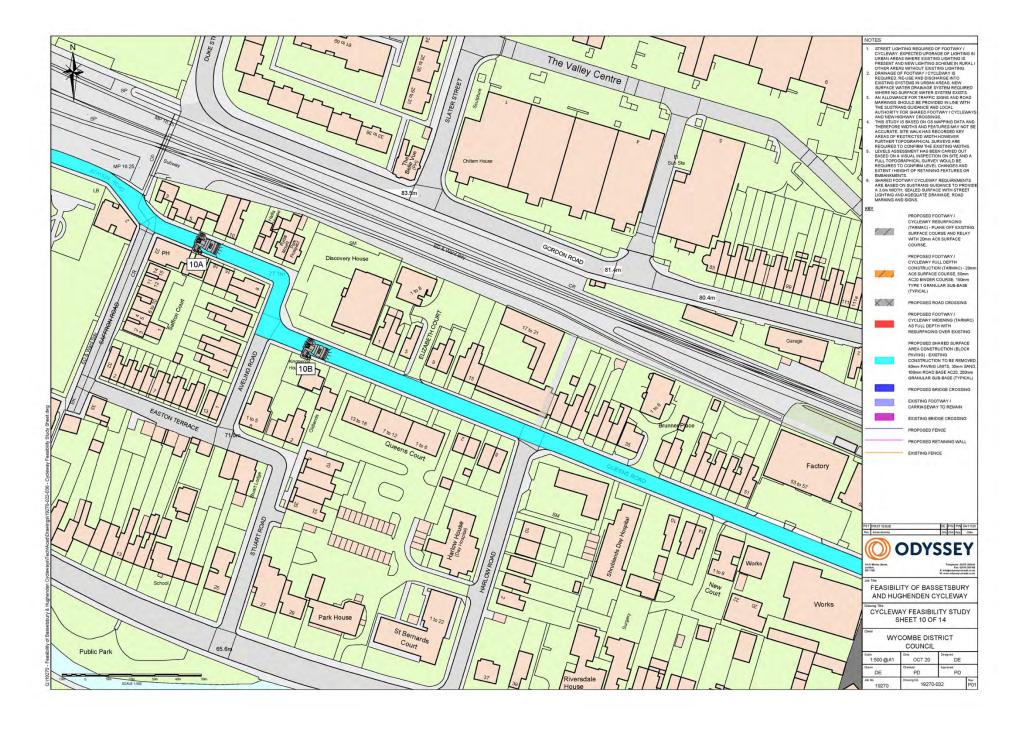


9d – Birdcage walk



9e – Birdcage Walk emerging onto Station Road





Map 10 – Queen's Road

- 10.1 The proposed route continues on Station Road, Aveling Road, and then onto Queens Road.
- 10.2 These roads serve a mixed residential / light industrial, there is no through-traffic, and for the most part they are quiet and safe and suitable for cycling.



10a – Aveling Road



10b – Queens Road



Map 11 - Queen's Road to Princes Gate

- 11.1 The proposed route leaves Queen's Road utilising a gap between 69 and 71 Queen's Road, and then follows the base of the disused Bourne End railway embankment before emerging at Gordon Road.
- 11.2 The alley between 69 and 71 Queen's Road belongs to the owners of the factory building ad they are considering whether it might be made available to the Council.
- 11.3 There are steps as the alley joins the public footpath, and the alley slopes relatively steeply as it approaches the street, so reprofiling this to lessen this slope and remove the steps will be needed.



11a - Alley between 69 & 71 Queen's Road



11b - Alley between 69 & 71 Queen's Road (detail)

11.4 There is, in theory, a 2m metre wide strip of level ground between the foot of the embankment and the edge of the railway land, however many of the gardens at the rear of Queen's Road have been extended to occupy this land, so the cycle route would have to ascend the embankment to find sufficient width, and consequently will require the construction of retaining walls to support the embankment.



11c - Base of the railway embankment, rear of Queens Road

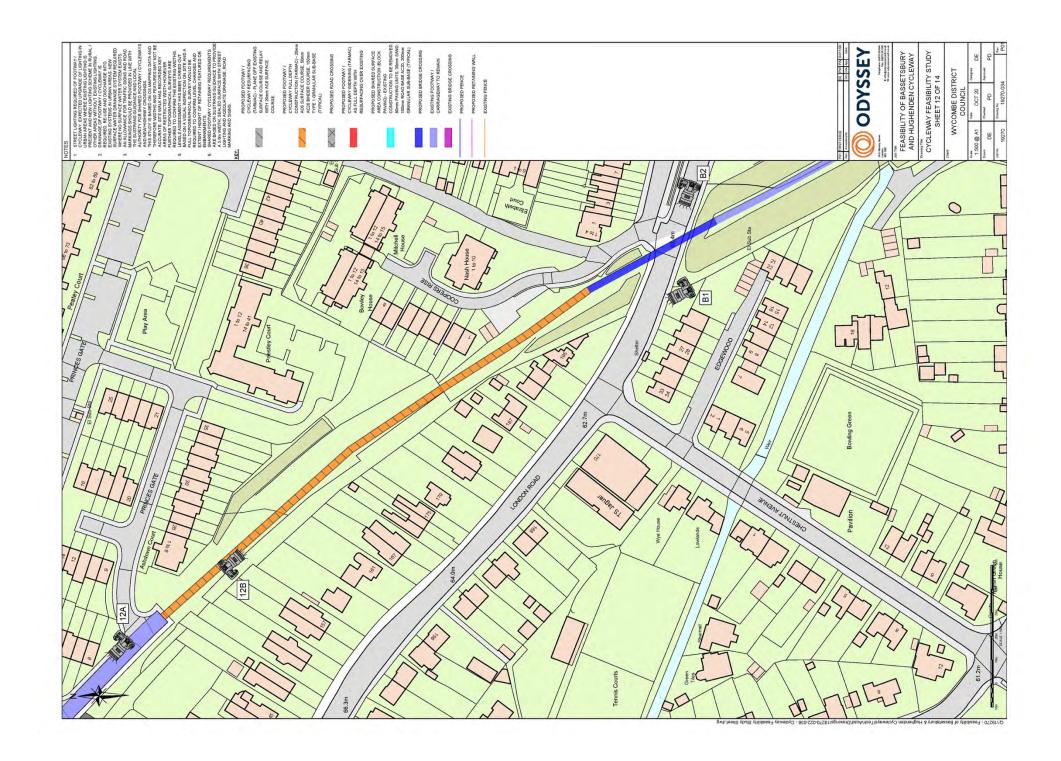


11d Embankment at the rear of Queens Road showing encroachment

- 11.5 The railway embankment is owned by Network Rail, which has indicated that it is willing to sell it to the Council for use as a cycleway.
- 11.6 The traffic lights at the junction of Gordon Road and Princes Gate will require minor modification to allow a cycle crossing.



11e Junction of Gordon Road and Princes Gate



Map 12 – Princes Gate to the London Road

12.1 The proposed route continues along Princes Gate until an existing stub-junction, and then leaves the public highway and follows the route of the disused railway track over un-made ground unit it reaches the London Road.



12a - Princes Gate

12.2 The first two-thirds of this off-road section is across owned by Taylor Wimpy Ltd, and is land that was reserved for a now abandoned bus-way project, but its use for cycle off-road is protected in the WDC Local Plan. Taylor Wimpy's agent has made several unsuccessful Planning applications for

development of homes on the land, in each case rejected for failure to adequately provide for the cycle route. Taylor Wimpy Ltd has been approached regarding its intentions for the land, but has yet to respond.



12b - Land rear of London Road at the end of Princes Gate

- 12.3 The remaining third of is section to London Road is over Council owned land.
- 12.4 The surface of the land is uneven and rough, so some earthworks will be needed to create an even gradient and a suitable surface suitable for a cycleway.

London Road Bridge – see appended report

The A40 London Road is the main east/west arterial route through High Wycombe and forms a barrier to the cycle route, and crossing it satisfactorily is problematic.

The disused railway track is raised approximately 5 metres above the road level to provide clearance for a now long-since demolished railway bridge, and while there is space for a suitably pitched ramp down to street level on the southern side of the embankment (see map 13), there is not on the northern side.



B1 - London Road between the railway embankment

There are three options to overcome this difficulty:

 Acquire land from the residential properties either side of the embankment so that a suitably pitched on / off ramp can be constructed;

- Excavate some or all of the northern embankment so that the cycleway joins at road level;
- III. Construct a bridge.

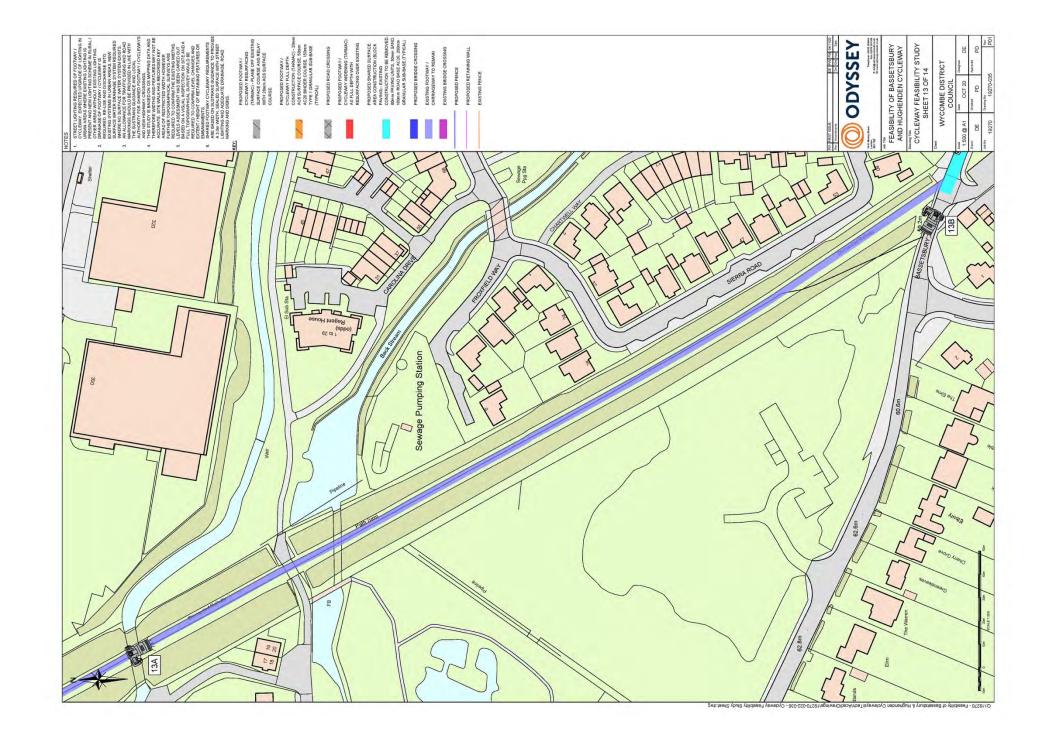
There is a recently installed toucan crossing across London Road between the embankments.

The preferred solution is a bridge because it isolates the cycle and motor traffic, albeit at significant cost. Appended to this study is a separate report that explores the considerations and cost of constructing a suitable bridge.



B2 - Impression of a bridge to link the embankments over London Road





Map 13 – Bassetsbury Embankment

- 13.1 The proposed route follows the old railway track bed before the highway at Bassetsbury Lane.
- 13.2 The Bassetsbury embankment crosses the valley floor between the London Road and Bassetsbury Lane. It is owned the Council and has long been an informal footpath and seasonal cycle path. As part of the part of the planning gain from an adjacent Council-sponsored housing development, a 3m wide all-weather combined cycle and foot path is being laid and the access points at each end are being reprofiled to improve access for cycle.

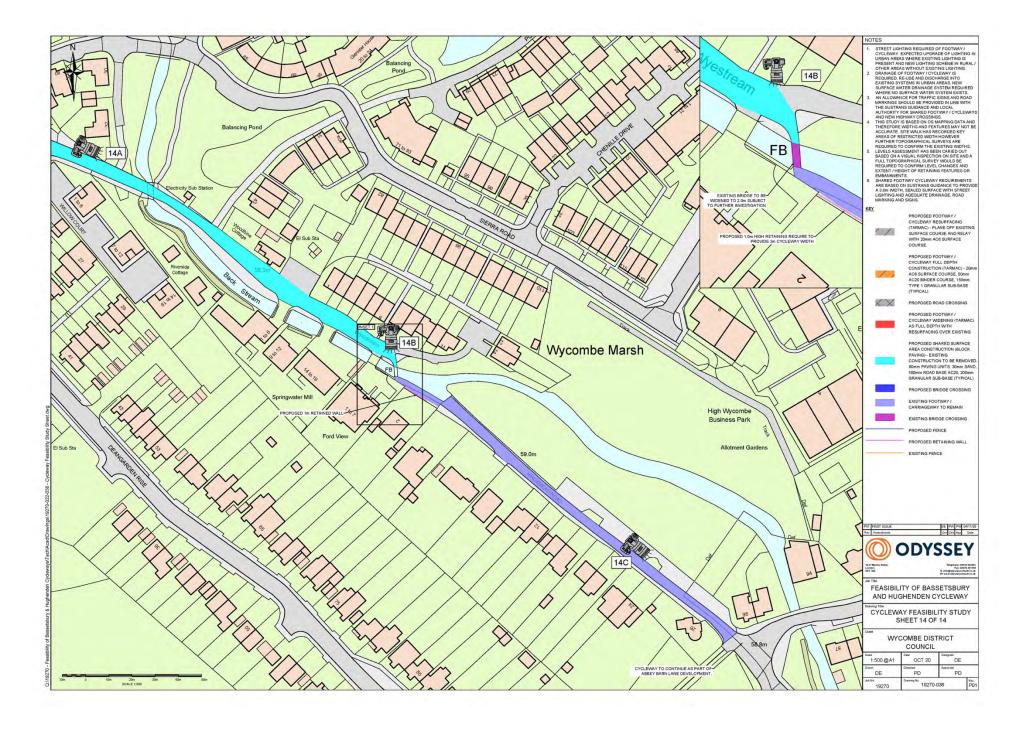


 ${\bf 13a}$ - Bassetsbury embankment track bed (before enhancement works have started)



13b-The embankment as it meets Bassetsbury Lane

13.3 No further work is proposed on this part of the proposed route.



Map 14 – Bassetsbury Lane & Kingsmead Road

14.1 The route returns to the public highway and follows Bassetsbury Lane and then Kingsmead Road where it joins Abbey Barn Lane.



14a – Bassetsbury Lane

14.2 As Bassetsbury Lane ends the route crosses Back Stream. The existing footbridge is unsuitable for cycles because of its width and orientation and should be replace by a wider to accommodate shared use, and aligned to eliminate the sharp turns currently need on approach to it.



14b – Bridge over Back Stream at Bassetsbury Lane

14.3 The route continues along Kingsmead Road to its junction with Abbey Barn Lane. This part of Kingsmead Road is access only, and is traffic calmed with speed cushions.



14c - Kingsmead Road

14.4 The route beyond the junction with Abbey Barn Lane is beyond the scope of this study.

Land Ownership

The proposed route for the most part follows existing the existing public highway, although noted that the adoption process for Hughenden Boulevard is not yet complete, it is assumed therefore that consent for work thereon is in the gift of the Council in its role as the local Highways Authority

The table below lists ownership information of private land over which the proposed route passes.

Мар	Location	Owner	Title	Comments
1	King George's Field	Trustees of Hughenden Village Hall	BM355550	
	Sports field and land south of King George's Field	Hughenden Parish Council	BM50491	
1 & 2	Pasture land between the sports field and Hughenden Manor	The National Trust	BM166373	
3	Land alongside the access lane to Hughenden Manor	The National Trust	BM341703	
	Magnolia Park	Walters Leisure Ltd	BM88010	
4	Hughenden Park Open space	Buckinghamshire Council	BM413310	
5	Land in front of Mulberry Court	Buckinghamshire New University	BM222550	Required for widening of the existing pavement
6	Land adjacent to the Bellfield Road junction	Buckinghamshire Council	BM389084	Required for widening of the existing pavement
	Land in front of Morrisons supermarket	Morrisons Supermarket	BM219089 (Freehold) BM392239 (Leasehold)	Required for widening of the existing pavement
9	High Wycombe station forecourt	Buckinghamshire Council Network Rail (freehold) Chiltern Railways (Leasehold)	BM267270 BM265778 (leasehold) Freehold - unregistered	Required for access to the station, and onto Birdcage Walk
	High Wycombe station parking court	Network Rail (freehold) Chiltern Railways (Leasehold)	Freehold - unregistered	Required for widening Birdcage Walk
11	Land between 69 & 71 Queens Road	Questspan Ltd	BM220256 (Freehold) BM407728 (Leasehold)	Required to facilitate access to the railway embankment at the rear of Queens Road
	Land at the bottom of the railway embankment	Network Rail	Unregistered	Required to link Gordon & Queens Roads

12	Land at the rear of 147 – 185 London Road	Taylor Wimpey Ltd	BM231026	Route of the disused Bourne End railway
	Land at the rear of 185 – 195 London Road & on the southern side of London Road	Buckinghamshire Council	BM380391	Route of the disused Bourne End railway and abutments for the now demolished London Road bridge
12 & 13	Bassetsbury railway embankment	Buckinghamshire Council	BM416541	Route of the disused Bourne End railway

Estimated costs

The estimates cost of the route is £8.355m, which equates to £1,177 per linear metre. In addition, the cost of the London Road Bridge is estimated to be £???m.

The route cost is composed of:

1.	Construction costs	£4,485,000
2.	Contractor's preliminaries, overheads and profit	£1,435,000
3.	Risk allowance	£1,184,000
4.	Design and s278 costs	£1,137,000

The bridge cost is based on the cost similar structures constructed elsewhere.

The cost above do not include the Council's internal costs, nor land or rights acquisition and other similar costs.

A detailed cost assessment is provided in the appended report "Bassetsbury & Hughenden cycleway Feasibility Construction Cost Estimate

Acknowledgements

The cooperation and efforts of the following firms are noted in the production of the this report:

Chiltern Railways
Gardiner Theobald
Network Rail
Knight Architects
Odyssey Markides
Transport For Buckinghamshire

Appendix 1

London Road Cycle Bridge – Design Options Evaluation, Knight Architects, 13 January 2020

Appendix 2

Bassetsbury & Hughenden cycleway Feasibility Construction Cost Estimate, Gardner & Theobald 12th November 2020