Appendix 11
Barton Greenway Review

Nigel Brigham & Associates
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A report for
Cambridgeshire County Council
Introduction

This report is based on fieldwork carried out in 2016 to review the Greenway network around Cambridge as shown here.

An overview of the Greenways is covered in the Cambridge Area Greenways Review Main Report with each Greenway covered in detail in an Appendix.

Acknowledgments

Special thanks to Alasdair Massie for some very good suggestions as to how to deal with some tricky junctions on the Barton Greenway. These had already been identified as problems and Alasdair’s solutions address the problems so well that some of his images have been reproduced, with his agreement. See points 12, 32, 48, 50.
**Barton Greenway**

Barton is very close to Cambridge and was one of the first villages to have its own dedicated off-road cycle link with the City. It is an important gateway to the City for a number of villages and the report looks at links beyond Barton to some of these villages.

There are a number of options for routes and given the very different functions of the routes the options have been left open.

The most attractive route from Barton and the route that serves South Cambridge best is the bridleway route via Grantchester. The report recommends surfacing and junction improvements on this and then proposes a new route from Grantchester into the City with the favoured option being a point closure of Grantchester Road. This option will need careful consideration but is a good way of protecting this attractive road and would bring benefits for the village. The existing path from Barton to Cambridge besides the main road serves West Cambridge well and has the advantage of being entirely off-road and lit. Improvements and changes are recommended to the route.

The extension of the Greenway to Comberton is also considered. This is the obvious alignment for Comberton residents heading to the City Centre or South Cambridge. The existing route is narrow and lacks continuity.
Trip Generators and the focus of the Study

Key destinations that have been considered are:

- Barton
- Cambridge City Centre
- West Cambridge
- Trumpington for links with South Cambridge
- Grantchester
- Comberton
- Little and Great Eversden.
- Mullard Radio Astronomy Observatory
- Western Orbital (scheme details unknown but if it goes ahead would include a busway and if away from M11 a cycleway on one side or other of M11)

Links that have also been considered include:

- Comberton Village College
- Wimpole Hall
- Haslingfield
- Coton Greenway

The case for Works

The route between Barton and Cambridge was one of the early schemes delivered by the County Council. Barton is very close to Cambridge and within easy cycling distance, it is a congested corridor and there were good opportunities on highway land. This argument still applies and there is a strong case for bringing the route up to modern standards addressing some of the more challenging issues. For any investment to be worthwhile it needs to deliver a high quality route along the whole corridor that works well at peak times.

The existing permissive path across Grantchester Meadows between Grantchester and Cambridge was also an early scheme and is now very busy and in need of widening. Given the proximity of Grantchester and Cambridge and the relatively low cost of a road point closure the economic case should be good.

The further communities are from Cambridge the lower the cycle usage is likely to be, but there are also strong arguments for extending the route beyond Barton. Given the size of Comberton and the proximity to Barton an upgrade of the Barton to Comberton is the obvious priority. There is an existing substandard route and if new investment is to be worthwhile it will need to be transformational and deliver a high quality route that is an attractive option for travel to and from Cambridge.

Whilst Comberton has an existing substandard route there are communities beyond Barton with no route at all and with little choice but to cycle on the A603 itself or to drive. There are therefore important road safety aspects to consider. A good route to Little Eversden would put this within safe cycling distance of Cambridge for some, but to be genuinely useful for the rural communities a link with Comberton Village College is also needed. An extension to Wimpole Hall would make this an attractive tourism/leisure option, adding an additional case for the route.
Summary of Comments

Detailed comments are covered in Appendix 11.

City Centre to Newnham

The proposed Greenway starts at Mill Lane/Granta Place in the City Centre and despite this being an existing promoted route it is not obvious and not to a similar standard as other comparable routes in the City Centre. The area is precious and heavily used, but there seems to be scope to improve the experience for users whilst also protecting the area and some changes are recommended.

Newnham to Barton via Grantchester

Three options have been considered between Newnham and Grantchester and it is recommended that a new route is developed following the Grantchester Road. The possible point closure of Grantchester Road would bring significant benefits but will need detailed consultation. A more expensive option than point closure would be to construct a new path following the road along field and sports field edges.

Between Grantchester and Barton there is an existing bridleway that is a very direct and attractive route. It crosses the M11 on an existing farm accommodation bridge and links well with roads at both ends. Surfacing the existing path and improving junction details at the Barton end with changes to the road layout is proposed.

Newnham to Barton (A603 alignment)

The existing Barton path was innovative in its day with careful consideration given to the crossings of side roads and in places the path well set back from the carriageway. The route generally works well, but space is tight at the Lammas Land end, the crossings of side roads can be tricky at times, the crossings of motorway slip roads are a concern and path surfacing is an issue, so there is definitely potential to improve the route. Improvements are proposed which might fit well with Western Orbital plans.

Barton

Within Barton the existing path continues besides the A603 to the High Street and another path along New Road heads to the village centre. The main proposals for Barton are in relation to changes to junctions to improve linkages combined with extension of the route further along the A603 corridor to pick up more of the local population. The existing shared use path stops at Barton High Street and beyond that there is a footway of variable standard to the village edge, where the route finishes. In order to deliver a good quality route the existing path will need to be widened.
Links

The main links proposed aim to link Barton with Comberton and the Mullard Observatory and the Eversdens and also to link the Eversdens with Comberton. Routes can benefit trips to school as well as trips into Cambridge.

Barton to Mullard Observatory (A603 corridor)

From the edge of village there is space in the highway verge to continue the path but as it approaches Bourn Brook that becomes more difficult and a field edge path would be a better option. The aim is to develop a route that continues at least as far as the University buildings.

Mullard Observatory to Eversdens

This route has not been surveyed, but is considered a valuable route. The obvious alignment would follow the line of the radio telescope or possibly Bourn Brook from the A603 and then follow a field edge path into Little Eversden. Any route will be subject to agreement with landowners and should also address the Little Eversden – Great Eversden link.

Barton to Comberton

For Comberton residents heading to central Cambridge and South Cambridge a route via Barton is the obvious alignment. This will also be important for Barton residents going to Comberton Village College. There is an existing off road route but it is to a poor standard and would benefit from rebuilding. Within both Barton and Comberton villages it will be necessary for cyclists to join the carriageway and 20 mph zones in both villages would be appropriate, but between the villages an off-road solution is recommended.

Comberton to Eversdens

A link between Comberton and the Eversdens can use some of the proposed link between the Mullard Observatory and the Eversdens. An additional new link is proposed to link directly with Comberton Village College. The proposed alignment has not been surveyed, but seeks to avoid Royston Lane.

Other links

To improve the link with Haslingfield changes to the A603 junction would be beneficial. This is a popular route for cyclists heading for Chapel Hill and beyond.

Within Barton itself the existing path that runs between the A603 and the High Street across Barton Recreation Ground is an attractive path that could easily be widened, subject to local consultation. A higher priority in this case is likely to be changes to the junction where the path meets the High Street.
Route Details and Maps

- **Barton Greenway Map 1**

1. On road route through City Centre links with various Greenways.
2. Haslingfield Greenway via Trumpington.
3. The proposed Greenway starts at Mill Lane/Granta Place in the City Centre and despite this being an existing promoted route it is not obvious and not to a similar standard as other comparable routes in the City Centre. *Replace gates with bollards and add cattle Grid and appropriate fencing at suitable location, away from bridge.*
4. Upgrade path at boat crossing point.
5. Narrow path across Sheep’s Green 1.9m wide. *Widen path to 3m subject to agreement with City Council and others. Replace two narrow bridges 1.2m wide with wide bridges perhaps 4m wide.* The area is very busy and it is not appropriate for people to be cycling through at high speeds, but there is scope to improve the experience for users whilst also protecting the area. Wider bridges would be to allow the bridges to become places where people can linger. At present bridge users often need to move on quickly to make way for others.
6. Existing path 2.5m wide with cattle grid leads to Toucan crossing of Fen Causeway.
7. Segregated path 3.1m wide.
8. Link follows a narrow road rather than a possible route on the edge of Lammas Land. *Consider surfacing a path on southern edge of Lammas Land.*
• **Newnham to Barton**

There are two obvious alignments between Newnham and Barton and choices are limited due to the need to use an existing crossing of the M11. The choices are either alongside the A603 Barton Road or via Grantchester. Both options have their advantages and both are worth developing. A route via Grantchester has potential to link up well with south Cambridge and could be a very attractive route, but there are important destinations along Barton Road itself that make that a good option. Both options are therefore reported on.

• **Newnham to Barton via Grantchester**

The three options considered are indicated on the adjacent plan. Whilst Option iii is the established route it is recommended that a new route is developed following the Grantchester Road. This has the advantage of developing a route that is better suited for commuting than Option iii (shown right), whilst relieving pressure on the existing path. The existing path could be widened and this would be relatively easy in places, but challenging elsewhere. However it may be more appropriate to leave it as a primarily walking route.

For Option i. to be suitable changes are needed to Grantchester Road. The possible point closure of the road would bring significant benefits but will need detailed consultation. The road is not busy, apart from at peak times, but the nature of the road means that even low traffic volumes can be off-putting for non-motorised users. If a point closure were to go ahead the location would need to be agreed, but in the vicinity of the sports fields is an option. Any closure would need to allow buses and emergency services through. **Option i. with a point closure of Grantchester Road is recommended.**

A more expensive option than point closure would be to construct a new path following the road along field and sports field edges (Option ii). This is an alignment that people are using and would need the agreement of a number of landowners together with some changes to ensure that the route did not interfere with College Sports Fields activities. Option ii should be achievable subject to agreement and funding.
Barton Greenway Map 2

9. Good crossing. **Add nearside signals to improve visibility for users.**

10. The path is constrained in this area by a hedge. Ideally this would be moved back, but not a priority.

11. Generally the route along Barton Road is of good quality, crossing side roads on raised tables.

12. Grange Road is the most difficult of the crossings along this stretch of Barton Road. It is a busy road and options have been limited, but the City Centre Access Proposals suggest a possible peak time closure of Grange Road. This means that installing signals at the junction is a realistic option. A better alternative would be to move the give way lines forward and move the path away from the properties and into the carriageway to improve visibility and make it easier for cyclists to pass behind cars waiting at the junction. In order to do this it would be necessary to remove some of the car parking and realign the kerb. Removing car parking needs to be considered as part of the City Centre Access Proposals. **Remove parking near junction and realign path at junction, as below.**
• **Barton Greenway Map 3**

13. Existing toucan crossing. *Widen path around corner for link to Grantchester Road and construct raised table in Grantchester Road for users to join/leave the carriageway.*

14. Route on road on Grantchester Road. *Designate road as 20mph.* Road can be very congested at peak times and does not work well.

15. *Route to continue on road to Grantchester assuming road point closure in place to south of Sports Grounds. Road closure would need to allow for buses.*

16. Alternative route along edge of Downing College and Pembroke College Sports Grounds need a new path and Colleges agreements, including likely changes to car parking arrangements for Pembroke College and measures to protect the sports grounds and activities, such as fencing or hedge planting.

17. Route along residential streets.

18. Route through car park. If this route is to be developed the car park needs surfacing.

19. Narrow surfaced path 1.5m wide between hedge and fence. If this route is to be developed the fence needs removing or moving back and the path needs to be widened.
• **Barton Greenway Map 4**

20. The best place for a point closure will need more consultation. A possible location is just to the south of the St Catherine’s College Sports Ground entrance so that the entrance can be used as a turning point, although the gates may need moving back. *Close road to through traffic at suitable location.*

21. Route on road on Grantchester Road then Broadway.

22. Alternative route, (if road closure not favoured) along edge of St Catherine’s College Sports Ground, subject to College agreement.

23. Existing permissive unsurfaced route along field edge. Would need surfaced path if preferred option. An informal link with St Catherine’s land is already established.

24. There is at present no route following the road in this area, but it is possible subject to landowner’s agreement.

25. Narrow path 1.2m to 1.5m would need widening to 3m min, if preferred option.

26. Route enters Grantchester on unsurfaced track, by Red Lion. Would need surfacing if preferred option.

27. Route on village roads.

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Barton Greenway Map 5

27. Route on village roads.

28. Farm track / bridleway. A good base but loose and needs surfacing to 3m.

29. Very good crossing of M11 on bridleway bridge. This was considered as an option for Haslingfield Greenway but is a significant diversion from Haslingfield and was discounted.

30. Path is 1.8m wide with loose surfacing. Surface to 2.5m with sealed surface.

31. The path divides into 2 parts and then passes between hedges as it approaches Barton. Widen path as much as possible and to at least 2m by removing segregation and surfacing with a good even surface to replace the existing.

32. The bridleway meets the A603 almost opposite New Road and near Roman Hill. There are paths on the opposite side of the main road and generally linkages are poor. There is a central refuge with guard railing that is 1.8m wide, but the whole area needs reviewing. A new continental geometry roundabout to reduce traffic speeds, make it easier for cyclists (and if appropriate and possible horse-riders) to cross and easier for joining traffic is recommended (see left).
33. For route along New Road and through village centre see notes later.

34. Existing path 2m wide set back from carriageway.

35. The existing route currently stops at the High Street meaning a significant part of the village cannot access the existing path to Cambridge and those beyond the village have no access. **Tighten road junction and construct swept path across the road set back from the junction.**

36. Space is restricted in front of the White Horse Inn but there are opportunities to construct a good path 2.5m wide + 0.5m verge. **Remove bus layby and make bus stop in road. Relocate bus shelter and relocate the edge of the carriageway by removing central hatching to allow good path to be constructed to Holben Close.**

37. **Between Holben Close and the Haslingfield Junction cut back vegetation and relocate the edge of the carriageway by removing central hatching to allow good path and verge to be constructed. Relocate speed camera.**

38. For link to Haslingfield Road. **Tighten junction and move carriageway south into bus layby, with bus stop in carriageway to allow central refuge and safe crossing to be constructed.**
39. From near Haslingfield Road to the last housing in the village there is a narrow path within a wide verge. *Widen path to 2m minimum keeping well away from carriageway edge.*

40. There is space in the verge to continue the path beyond Tit Brook. *Construct new path in highway verge to beyond Tit Brook.*

41. Between Tit Brook and Bourn Brook space in the highway verge becomes more restricted and a field edge path would be a better option, subject landowner’s agreement. The aim is to develop a route that continues at least as far as the University buildings. There are a number of options including moving the whole carriageway south-east. *Construct a path that links with Mullard Laboratories entrance.*

42. An option would be to cross the road at Bourn Brook and construct a path on the south-east to reach the University buildings.

43. For onward link between the A603 corridor and the Eversdens landowner’s agreement will be needed to construct a field edge path. The best alignment would follow the disused railway/ radio telescope alignment, but there are alternatives. *Construct path between Royston Lane and A603, subject to agreement.*
Barton Greenway Map 8

Route joins route already detailed – see earlier pages.

13. Existing toucan crossing. **Widen path around corner for link to Grantchester Road and construct raised table in Grantchester Road for users to join/leave the carriageway.**

14. Route on road on Grantchester Road. **Designate road as 20mph.** Road can be very congested at peak times and does not work well.

44. The path crosses side roads on raised crossings, but with give way markings at all junctions. **Consider ways to change priorities as in the Dutch example to the right.** It would be timely to revisit these particularly in the light of lessons from Hills Road and other city schemes in recent years. The path is busy at peak times. **Look for suitable opportunities to widen.**

45. Within the built up area the path is segregated and shared use beyond the built up area.

46. Path in highway verge 2m wide generally with verge but in places with no verge. Path in poor condition **needs bringing up to good standard.**
The Greenway crosses the M11 on a bridge, but it crosses roundabout junctions at grade. These crossings are difficult and the weakest part of the whole route. To improve the situation changes to the road alignment and roundabouts are proposed. This area is likely to form an important part of the Western Orbital bus corridor and this should be an opportunity to change the roundabouts. Local users will undoubtedly want to see changes sooner rather than later.

- **Barton Greenway Map 9**
  47. Path is set well away from the carriageway and crosses private farm road before junction.
  49. Existing narrow path over motorway. Path is 1.4m wide and parapets are 1m high and therefore not up to standard. *Reposition path into carriageway by reducing carriageway to single lane and designating one lane as a two way cycle route.*
  50. Crossing of slip road, where speeds can be high. *Re-align slip road see following page.*
  51. Path in poor condition and overgrown at time of visit. *Path needs rebuilding and re-aligning.*

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Crossing of M11 slip roads (west) ref 50

Any changes need to address two major issues:

1. Improving the crossing of the slip road by reducing vehicle speeds and improving visibility.

2. Improving the crossing of the M11 by re-allocation of road space and establishing a two-way route along one lane of the carriageway.

The proposal is sketched above and is to replace the existing roundabout with a Dutch style “Turbo” roundabout to reduce speeds, improve lane discipline and improve visibility and alignment of the cycle path crossing. The exit lane is reduced to single lane over the M11 to create a wide cycle path with adequate clearance to the parapet and the roadway.

Crossing of Roundabout (east) ref 48

Any changes need to address two major issues:

1. Improving the crossings of the exit and entry arms of the roundabout for the Greenway.

2. Provide options for other movements particularly those heading to or from Grantchester and Coton.

The proposal is sketched above and is to replace the existing roundabout with a Dutch style “Turbo” roundabout to reduce speeds, improve lane discipline and improve visibility whilst re-aligning the entries and exits to the roundabout to improve crossings. Paths have been shown to help cyclists using the roads to navigate around the roundabout and a suggested additional path to link with the Coton road beyond the M11 slip road. (Not surveyed).
• **Barton Greenway Map 10**

52. Path crosses Rifle Range entrance. *Mark path clearly over junction.*

53. Existing path 2m wide in highway verge *needs resurfacing and bringing up to current standards.* Path has no verge over one stretch.

54. See note 32. *Significant changes needed at this crucial junction to ensure good links between routes on all 4 arms and with Roman Hill.*

55. Existing path 2m wide in highway verge.

56. *Add raised platform and cycling zebra at village entrance near Burwash Manor entrance for link between on road and off road facility.*

57. *Designate road through village centre on New Road, as 20mph.*
57. **Barton Greenway Map 11**

   Designate road through village centre on New Road, as 20mph.

58. **Barton Greenway Map 11**

   Designate road through village centre on High Street, as 20mph.

59. **Barton Greenway Map 11**

   Tighten up High Street/ Mailes Close junction and add cycling zebra crossing by entrance to Recreation Ground.

60. Path through Recreation Ground is a useful link. The path is currently 1.5m at the southern end and 1.7m at the northern end with ample verges. *Consider widening to 2m, but a lower priority than route to Comberton.*

61. Construct raised table at suitable location for on road route to join off-road route. Widen path on highway land to join up with existing path. The existing shared use path ends just beyond a layby. It can be extended beyond the layby, but perhaps more importantly the route should join the carriageway in an obvious manner.

62. The existing path is generally 1.5m wide, so would need widening by at least 0.5m with a verge adding where possible. There are some constraints such as a bus shelter but improving the route would be very valuable. *Widen path to 2m minimum and add verge where possible. Add solar studs.*
For Comberton residents heading to central Cambridge and South Cambridge, a route via Barton is the obvious alignment. This will also be important for Barton residents going to Comberton Village College. There is an existing off-road route but it is to a poor standard and would benefit from rebuilding. Within both Barton and Comberton villages it will be necessary for cyclists to join the carriageway and 20 mph zones in both villages would be appropriate. However, between the villages an off-road solution is recommended. The existing path can be widened relatively easily in places, but land is likely to be needed to get a good quality route.

- **Barton Greenway Map 12**

63. Over this length, in front of housing, the path is constrained by a ditch on one side and carriageway on the other leaving a 1.4m path with no verge, which is not up to standard. The path could be widened over the ditch by piping or bridging the ditch, but this brings it closer to the properties and the preferred option is to widen it by moving the carriageway edge south. *Widen path to 2m min + verge by moving carriageway northern edge south. Remove central hatching and re-align road by Horizon Park entrance.*

64. Existing path not up to current standards, apart from at Comberton end. The path narrows due to constraints of ditch and parapets. Path width drops to 1.1m, with no verge. *Construct new path in field edge behind ditch 2.5m wide. Subject to landowner's agreement.*

65. The existing crossing arrangement for cyclists diverts them up Long Road and is an unsatisfactory arrangement that few would use. *Add raised crossing and consider cycling zebra to east of mini roundabout so that cyclists from Comberton cross the mini roundabout and then turn on to the off-road path and vice-versa. Crossing to act as a Gateway for the village.*

66. On road route through village centre. Ideally the road should be designated 20 mph with appropriate traffic calming if needed. Consider removing central line and resurfacing with a different colour finish as well as adding raised platforms at various locations.
• **Barton Greenway Map 13 Eversdens Links**

43. For onward link between the A603 corridor and the Eversdens landowner’s agreement will be needed to construct a field edge path. The best alignment would follow the disused railway/ radio telescope alignment, but there are alternatives. **Construct path between Royston Lane and A603, subject to agreement.**

66. On road route through village centre. Ideally **the road should be designated 20 mph with appropriate traffic calming if needed.** Consider removing central line and resurfacing with a different colour finish as well as adding raised platforms at various locations.

67. Link with Comberton Greenway—see Comberton Greenway report.

68. Opportunities are limited along the road corridor, but given that the main destination is Comberton Village College a better alignment is possible. **Construct path along field edges between The Village College and Royston Lane with link through to West Street. Potential to accommodate horses/ bridleway usage to be considered.**

69. Royston Lane is considered too busy at peak times. **Construct path in field edges following Royston Lane, subject to agreement. Potential to accommodate horses/ bridleway usage to be considered.**

70. Route following field edge/ public footpath. Not surveyed, but known to have been discussed in the past. **Construct path to Little Eversden, subject to agreement. Potential to accommodate horses/ bridleway usage to be considered.**

A link between the Eversdens and Comberton has been highlighted because it is a known issue for residents in the area wanting safe, easy access to Comberton Village College and part of the proposed Barton Greenway route goes some way to providing this. The route has not been surveyed and needs more work.

See Page 14 for continuation
43. For onward link between the A603 corridor and the Eversdens landowner’s agreement will be needed to construct a field edge path. The best alignment would follow the disused railway/radio telescope alignment, but there are alternatives. **Construct path between Royston Lane and A603, subject to agreement.**

70. Route following field edge/public footpath. Not surveyed, but known to have been discussed in the past. **Construct path to Little Eversden, subject to agreement. Potential to accommodate horses/bridleway usage to be considered.**

71. If a route is developed for Little Eversden a good link with Great Eversden will be important. The existing road is a concern. **Review options for good link with Great Eversden and undertake necessary works.**

72. Potential route to Wimpole Hall. This has been examined in the past and was the subject of a funding bid many years ago. Works are needed but there is potential for a good link with the Wimpole Estate (National Trust).

73. If a route is developed for Little Eversden a good link with Harlton and Haslingfield will be important. The existing road is a concern and the A603 crossing is also a concern. **Review options for good link with Harlton and undertake necessary works.**

A link with the Eversdens has been highlighted because it seems an obvious ambition for the Barton Greenway to extend this far at least, but it has not been surveyed in detail and needs more work, including reaching agreement with landowners. Any route will need to be high quality because at nearly 6 miles to Cambridge this will not be an easy ride, but is entirely possible and it was the tragic death of a regular cyclist that first raised the profile of this route. A University Don died one night when cycling home to Little Eversden along the A603 nearly 20 years ago and there was a campaign at the time to build an off-road route that never came to fruition.
Recommendations

As early priority:

◊ Upgrade surface of existing path between Barton and Cambridge on A603 alignment over 3.5km, including cutting back vegetation.

◊ Upgrade surface of bridleway between Barton and Grantchester over approximately 1.5km to provide a good quality path of at least 2.5m width.

◊ Upgrade route between Granta Place and Fen Causeway including new path entrance, path widening for approximately 150m and 2 new bridges.

◊ Improve Grantchester-Cambridge route, including possible road closure. Consider early trial for this.

◊ Subject to good progress with design, land negotiations and planning approval.

◊ Construct new upgraded path between Comberton and Barton along road corridor for approximately 1.9km.

◊ Extend existing A603 path from Barton to Mullard Observatory for approximately 1.6km.

◊ Construct new path from near Mullard Observatory to Little Eversden and to Comberton Village College for approximately 4km.

◊ Address crossings of A603 and junction re-alignments including potential new roundabout in vicinity of New Road Barton, roadspace re-allocation and junction changes in the Barton area and Grange Road area.

◊ Make changes to 2 roundabouts and road layout near M11 crossing of A603, integrating this with plans for Western Orbital as appropriate.