Appendix 7 Linton Greenway Review



Nigel Brigham & Associates
October 2016

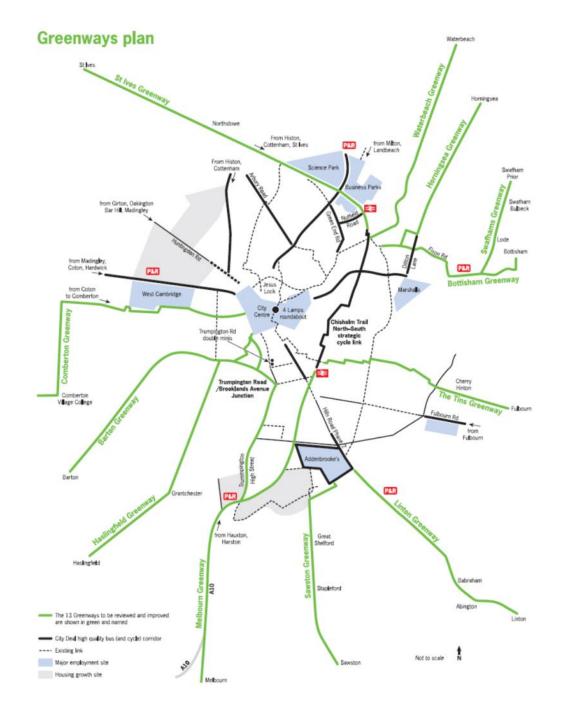
A report for



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.



Cambridge Area Greenways Review (V5) Linton Greenway —Appendix 7

October 2016

Linton Greenway

The Linton Greenway is made up of a number of distinct sections, with options in key locations. The City Deal A1307, Three Campuses to Cambridge scheme, is interlinked with this Greenway and the information within this report can feed into the proposals for that scheme. In the Babraham area the Greenway links with the Sawston Greenway providing choices for links with Cambridge and the Cambridge Biomedical Campus.

The existing path that follows the A1307 would be greatly improved by a new route into the Biomedical Campus, which should be possible with a new path through the former Bell School land (now the Nine Wells development). This should ideally be extended with a new path to Babraham Park & Ride site. The route continues in the highway verge following the A1307 and is generally 2m wide and is a sealed surface. There are areas for improvement

including the crossings of side roads and entrances and therefore a new section of path is recommended near to Babraham Institute.

At Babraham Institute a new path is to be built that will continue the existing route to the village.

Between Babraham and Little Abington/ Granta Park a good crossing of the A11 is needed, with four options identified. The favoured option is a route that crosses under the A11 besides the Granta, but all options are subject to agreement and need to be explored further.

Between Great Abington and Linton a good, safe crossing is needed of the A1307 and a new bridge is proposed in the vicinity of Hildersham. The big investment needed in a new bridge can only really be justified if there is a high quality route all the way through to Linton and the Village College. A route and options are identified with the best option subject to landowners' agreement.



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The case for Works

The case for improvements along this corridor has already been identified as part of the City Deal work with high priority being given to the corridor with high priority being given to the corridor as part of the A1307 Three Campuses to Cambridge scheme .



Cambridge Biomedical Campus—one of the major employment and economic activity centres near the Greenway corridor and one of the "Three Campuses".

Trip Generators and the focus of the Study

Key destinations that have been considered are:

- Cambridge Biomedical Campus/ Addenbrooke's Hospital
- Wandlebury Country Park
- Babraham Research Institute
- Babraham
- Potential Park & Ride site near Fourwentways
- Granta Park
- Little and Great Abington
- Hildersham
- Linton

Links that have also been considered include:

- Fulbourn
- Sawston
- Whittlesford Station

Summary

The route is discussed in distinct sections and at this stage it is not possible to be sure of what can be achieved so for some sections a number of options need to be kept open. The report also looks at a number of links.

Cambridge Biomedical Campus to Babraham Road Park & Ride site.

It is recommended that a new path at least 3m wide is constructed all the way from Dame Mary Archer Way to the south-west of the A1307, continuing to the existing signalled junction by the Park and Ride site. This will need landowner's agreement.

Babraham Road Park & Ride site to Babraham Institute

On this existing path there are locations where the greenway crosses accesses, with the entrance to the Gog Magog Farm shop being the greatest concern. A number of locations for possible improvements are identified, including adding a new central refuge and a new section of path, on the opposite side of the road to the existing or realigning the carriageway to allow the existing path to be widened.

Babraham Institute to Babraham Village

A new, 1.1 km, 2.5m wide, shared path is being built between the A1307 roundabout and the Close in Babraham village. This valuable link will connect Babraham village with the Greenway.

Babraham Village to Granta Park/Little Abington

Four options have been considered for the crossing of the A11. It is recommended that the following options should be taken forward if possible but all options will need to be pursued in case of difficulties with land negotiations and to ensure good links can be achieved.

 A new route following the Granta under the A11. This could be the most attractive option but requires landowner's consent.

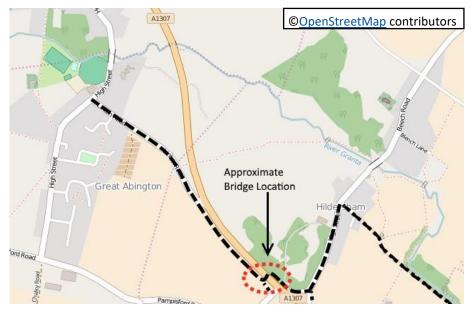


 A new route using the A505 underpass and existing road bridge over the A11. Space is restricted on this route but it remains an interesting option and it should be possible to re-allocate road space by changing the road to one-way.

Granta Park/Little Abington to Linton

The most obvious route for this is possibly the disused railway that runs parallel with the Granta Park boundary and around Great Abington and then close to the A1307, but this has been discounted as the favoured option because it would not serve well those considered to be the main potential regular users.

A route following existing rights of way between Hildersham and Linton could be one of the most attractive Greenways in the County. The identified alignment links very well with the centres of both villages. *A new bridge over the A1307 is recommended with good links to make this into a high quality route between Linton, Hildersham, Great Abington, Granta Park, Babraham and Cambridge.*



View showing potential bridge location near Hildersham that links well with existing routes and takes advantages of natural contours and highway land, but still needs some private land.

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Links

If the Sawston Greenway can be completed to a high standard it is likely that this would be the main route for links between Cambridge and Babraham.

A link with Fulbourn is identified in the Fulbourn Greenway section. The route could be upgraded, but is not considered a high priority at present.

An existing path besides the A505 that links towards Pampisford and Whittlesford Parkway is to a good standard, but includes some tricky crossings and the off-road link does not continue all the way to Granta Park. It is important that this is extended to Granta Park and linked to the Linton Greenway.

Route Details and Maps

- Linton Greenway Map 1.1
- 1. Existing "Genome" path—Sawston Greenway.
- 2. Existing route through Campus crosses railway line and joins Greenway to Station on west of railway.
- 3. Existing field edge path.
- 4. Existing link to Biomedical Campus.
- 5. Path through NineWells/ Bell School development agreed but not built. *Early completion is recommended*.
- 6. As part of the above a toucan crossing of Babraham Road is planned. The difficulty with this that it will connect with the existing path which is already too narrow for usage. *Investigate possible changes so that funding for crossing is allocated towards constructing a path and crossing as 8,9,10*
- 7. Existing path 1.9m wide although due to edge encroachment appears to be 1.7m wide. This is too narrow for the heavy usage at peak times with walkers and cyclists accessing the Park & Ride site.

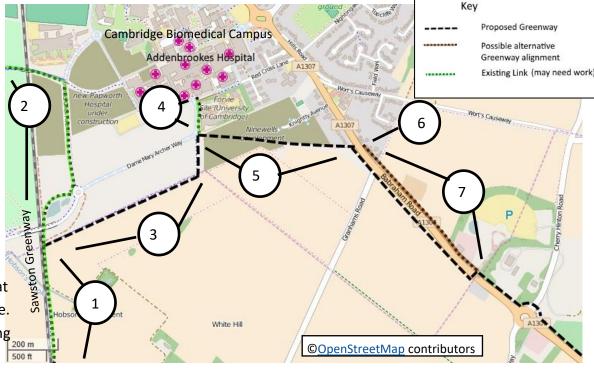
 There are also issues on the route to address including the crossing of a garage forecourt.







A new route between Babraham Road and Dame Mary Archer Way on the edge of Cambridge Biomedical Campus has been agreed as part of the Nine Wells / Bell School development. This would be a significant improvement on the existing path that follows the A1307 to the hospital entrance. At peak times the path is very busy and a lot of people walk between the Campus and the Park and Ride site and the existing path is not well suited to the number of users.



The Nine Wells Path

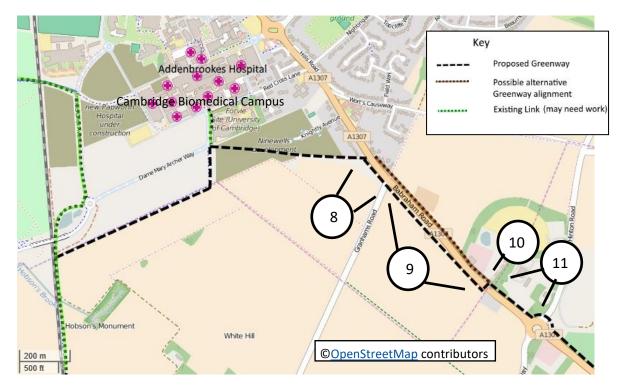
will join this existing

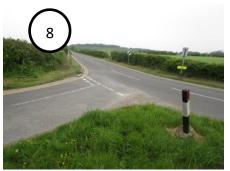
path from the right.

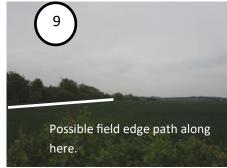
• Linton Greenway Map 1.2

- 8. Field edge path subject to agreement with landowners and planning approval. A key element of this will be a good safe crossing of Granhams Road. Construct field edge path either 4m shared use or segregated path and sweep path away from Babraham Road to cross Granhams Road away from the junction approximately in position of speed limit signs.
- 9. Construct field edge path either 4m shared use or segregated path subject to agreement.
- 10. Upgrade existing pelican crossing of Babraham Road by Park & Ride bus entrance to toucan and then cross Park & Ride access road with second existing crossing (toucan already).
 Alternatively create new crossing on third arm.
- 11. Move back fencing and widen path around bend and remove vegetation near junction to improve visibility. Trees may need to be removed. Surveys will be needed and this may reveal that a better option may be available with a new path through the tree belt. Link to existing path to roundabout—path generally 2m wide plus separation strip with painted line.

A new off-highway busway between Babraham Road Park & Ride Site and the Biomedical Campus was one of the options included in the initial consultation on the A1307 City Deal scheme.











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- 12. Crossing of roundabout junction generally works well.
- 13. Crossing of property entrance. *Clear back vegetation and mark path clearly across entrance.*

14. Crossing of Gog Magog Farm Shop entrance. This is a particular concern with poor visibility and a difficult exit for cars, combined with a steep hill where cyclists could be going very fast. Subject to landowner's agreement construct new path swept away from entrance to cross farm shop road away from entrance. Close existing roadside path when new alignment is built.

Park. This is not such a concern as 14 but would benefit from similar treatment if possible divert path away from road at entrance and then close roadside path.

16. Crossing of Magog Farm Barns
entrance generally good. Consider
additional surface treatment/
marking of path here and along whole route.

d be going very fast. Subject to
ew path swept away from entrance to
rance. Close existing roadside path when

Gog Magog Farm Shop

14

Som
New path alignment

COpenStreetMap contributors

Magog Down

16

Magog Down

Alignment

16

Magog Down

Alignment

Som
1000 ft

The section of route between the Park & Ride site and the roundabout at the Babraham Institute

popular for leisure at weekends and for staff travelling to Babraham Institute. The path that was

carriageway by a verge, but there are a number of locations where there is no verge separation.

entrance gives access to Wandlebury Country Park and a number of employment sites. It is

built in the north-east verge of the A1307 is generally 2.2m wide and separated from the









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- 17. The route crosses two accesses for Copley Hill Business Park. The first (northern) entrance works well for those travelling to Babraham but for those travelling to Cambridge the earth bank screens the view. Negotiate with Business Park owners to change landscaping or re-align path for northern access road crossing. The crossing of Copley Hill Business Park second (southern) entrance works well for those travelling to Cambridge but for those travelling to Babraham the planting screens the view. This is not as big an issue as the other junction , but suggest cutting back some of the vegetation to improve visibility.
- 18. After the Business Park the route runs in front of properties with no verge separation. This section will be difficult to use at night and unpleasant in heavy traffic and an alternative is recommended. The best option appears to be to use the space at the Business Park southern junction to create a central refuge and a crossing of the road, to link to a new route to be built on the opposite side of the road, set away from the road. This is dependent on negotiations with landowners. An alternative would be to re-align the carriageway to the south-west to create space to widen and improve the existing path. In the meantime the existing route is the best option and was of course the only realistic option on highway land.
- 19. Attractive but unsurfaced link with Fulbourn—see Fulbourn Greenway report.
- 20. Existing crossing of A1307 at roundabout splitter island. Widen and re-align paths around junctions including adding swept bends and moving light columns.







1000 ft





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A1307

Babraham Village to Granta Park/Little Abington A11 Crossing

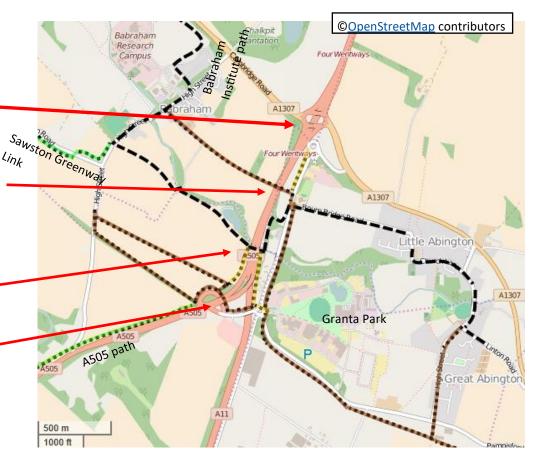
Four options have been considered for the crossing of the A11:

- i. A crossing at the existing A 1307/ A11 interchange, where there is a lot of highway space available, but a generally hostile environment and difficult slip roads to cross. This is considered a last resort.
- ii. A public footpath/ stepped footbridge option. This is a serious option with major works needed to add new ramps to the bridge and landowners' consent needed to upgrade the access to the bridge. It is understood that the landowner is not supportive at present.
- iii. A new route following the Granta under the A11. This could be the most attractive option but requires landowner's consent.
- iv. A new route using the A505 underpass and existing road bridge over the A11. Space is restricted on this route but it is an interesting option.

The favoured option will depend on many factors including the length and convenience of the route, as well as linkages on both sides of the A11. An additional factor is the potential new Park & Ride site in the vicinity, which is being considered as part of the A1307 City Deal consultation. The exact location of any Fourwentways Park & Ride site is unknown; it could be either side of the A11 and it is therefore hard to plan routes at present. This will be an important issue once a site is chosen.

Option iii is convenient for both the Sawston Greenway and the route through the Babraham Institute and has potential to link well with Granta Park and Little Abington. Option iv links well with the existing A505 path, but overall it is considered that Option iii has the potential to be the most useful and convenient route especially if linked to the A505 path.

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The plan above shows the main off road and quiet road links that need to be well connected together as well as the main entrances to the two big employers in the area. In order for a crossing to work well it will need to include a number of links and there are some interesting possibilities that run parallel to the A11 using either highway land, the disused railway, private land or a combination.

Options iii and iv should be taken forward if possible but all options will need to be pursued in case of difficulties with land negotiations and to ensure good links can be achieved.

Babraham Village to Granta Park/ Little Abington



There is an established route between Babraham and communities on the other side of the A11, with cyclists having used a public footpath for many years. This crosses the A11 on a stepped footbridge (seen in the image above) and is a potential route for the Greenway. (Option ii)





Option iii. The Granta as it flows under the A11 (left) with a view of highway land near by and parallel with the A11. (There is currently no easy access to this area)





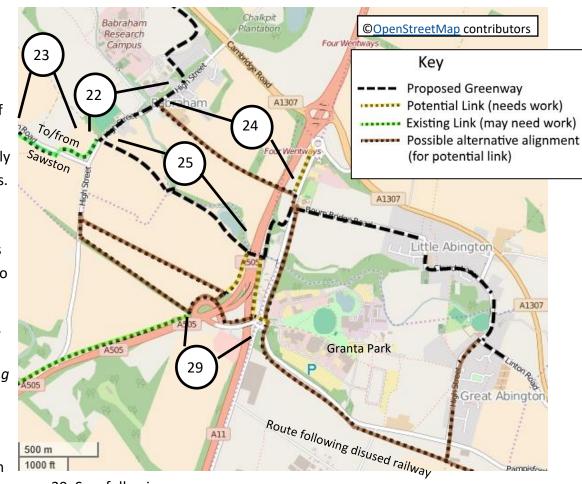


Option iv The A505 slip road as it passes under the A11. There is a lack of highway verge space at a crucial point, but this remains an interesting option and important for those using the A505 path.

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- 22. On road along Babraham High Street should ideally be 20mph.
- 23. Existing path to Sawston and potential 3 Campuses Cycle Route.
- 24. Existing established route across A 11 uses public footpath/ farm tracks. The existing path is partially surfaced with a short section of surfaced path. At present this is the only reasonable route, but to make a good route the surface will need to be surfaced to preferably 3m and it is understood that the landowner is not supportive of this. Ramps will also need to be added to the existing bridge which will be difficult. The bridge varies in width from 1.7m to 2.1m and with parapets at 1.15 m these are also substandard. It may be almost as easy to replace the bridge as to modify it. The recommendation is to leave this bridge and put all efforts into an alternative.
- 25. The preferred alignment is subject to landowner's, planning and EA consent and is a brand new route, approximately following the Granta from near Rowley Lane, Babraham. Construct 3m path along field edges and around reservoir passing under the A11 besides the Granta. Head height is not uniform under the bridge and lighting is likely to be needed. If the path is centrally positioned clearance should be adequate. It should be noted that this route may flood, in which case 29 would be a valuable back-up, so the link to this is vital.



29. See following page.



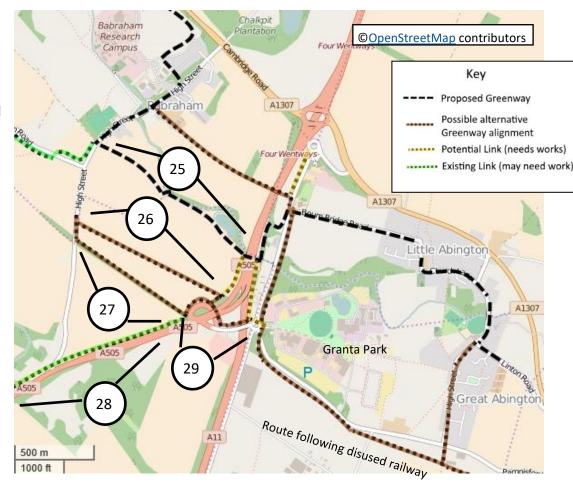






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- 25. See previous page.
- 26. Route along field edge subject to landowner's agreement.
- 27. Route along disused railway subject to landowner's agreement. The disused railway is an attractive option, but it appears to be being used for farming activities so 26 maybe a more realistic option.
- 28. Existing path link with Pampisford and Whittlesford Station. Only partially surveyed. The route passes under the A505 and over the A11 on road with traffic. See 29 for options on that section.
- 29. This route under the A505 is achievable on highway land, which makes this an interesting option. However where the route passes under the A505 it is constrained by a crash barrier to 1.3m in width and it would be necessary to accept this constraint over a short distance, unless roadspace can be reallocated, possibly by closing one lane of the carriageway. For the off-road alignment there are services which the route will have to pass around and where the route crosses the A11 parapet heights of 1.05 m and a path width of 1.8m add further complications. Reduce carriageway to single-way working (at least under bridge) and construct links to A505 path, to Granta Park entrance and with a new field edge route to proposed Greenway (25).



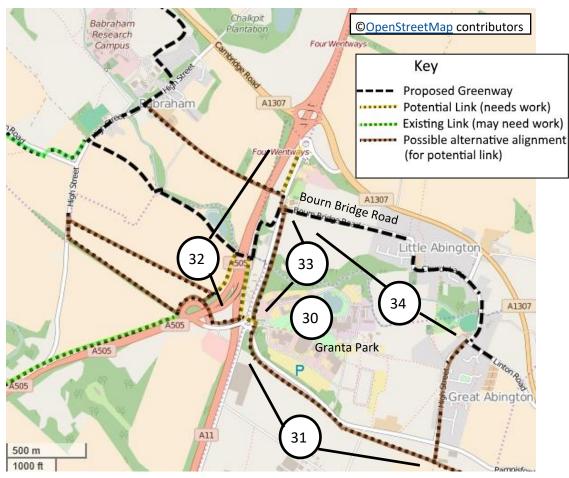






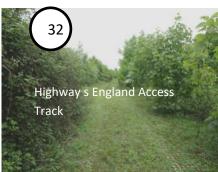


- 30. High quality routes and cycle parking at Granta Park are needed, but not surveyed.
- 31. It is possible for the route to continue around Granta Park using highway verge and the disused railway, however this alignment is unlikely to be attractive to Granta Park staff who will be able to use routes through the park and use private entrances to/from the Park. The route is also remote from Abington residents and is therefore not considered a priority.
- 32. There is space for linking routes along the A11 on highways land and the disused railway. Links with Granta Park, Bourn Bridge Road and any future Park & Ride site are an important part of any crossing and will be dependent on negotiations with landowners and Highways England. Construct off-road link from A11 crossing to Granta Park entrance and to Bourn Bridge Road and to new Park & Ride site if it proceeds. Construct link between A505 path and Greenway to west of A505.
- 33. There is space for a road –side path in the eastern verge along the road between Bourn Bridge Road and Granta Park apart from at the Bourn Brook crossing where new bridges would be needed or the road would need to be narrowed to single-way working.



34. On road route through Little Abington. *Ideally the village section should be 20 mph.*









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Granta Park/ Little Abington to Linton

The most obvious route for this is possibly the disused railway that runs parallel with the Granta Park boundary and around Great Abington and then close to the A1307 (see 31 on previous page), but this has been discounted as the favoured option because it would not serve well those considered to be the main potential regular users. Key potential users are considered to be:

- School children living in Little Abington, Great Abington and Hildersham wanting to get to Linton Village College.
- School children and families in Hildersham wanting to access Great Abington Primary School.
- Granta Park staff living in Linton.
- Employees of businesses near the A1307
- Leisure users
- Smaller numbers who want to access employment and other sites on the Cambridge side of the A 11 as well as those looking more towards Haverhill.

Granta Park employees have a private foot/cycle access to the site from Great Abington and are thus considered to have similar needs to Great Abington residents. Any route using the disused railway would involve a significant detour from the direct route for them. In addition in order to connect the disused railway with Linton Village College it is likely that changes to the existing signals in Linton will be needed. This may be difficult at a time when bus priority measures in Linton are high on the agenda. There is therefore a strong case for a new bridge over the A1307, if it can serve all of the above well.

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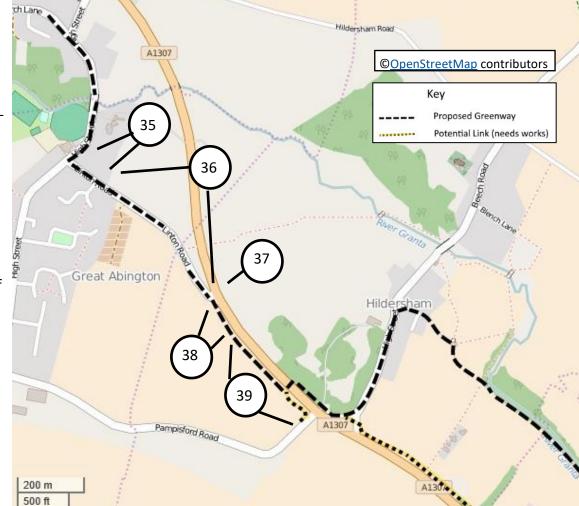
Any bridge across the A1307 will be a major capital investment and cannot be justified without high quality links with Great Abington Hildersham and Linton. The possibility for such routes do exist and a route following existing rights of way between Hildersham and Linton could be one of the most attractive Greenways in the County. The identified alignment links very well with the centres of both villages. There is also an existing path besides the A1307, which can offer useful links to employers such as Dalehead Foods, but the existing path is not good enough to justify a new bridge over the A1307 and if it was chosen as the final route major works would be needed. *A new bridge and high quality links are recommended*.



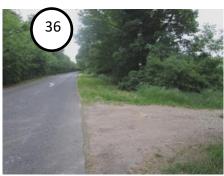
View showing potential bridge location near Hildersham that links well with existing routes and takes advantages of natural contours and highway land, but still needs some private land.

- 35. Route on road to Meadow Walk, ideally on 20mph village roads.

 Add new Village Gateway feature on Linton side of Meadow Walk
 junction for link with off-road facility. (Could be a road narrowing.)
- 36. Linton Road is relatively quiet but feels like a major road and an offroad facility is recommended, especially for school children. The best option would be a new path on a combination of highway and field edge land on the southern side of the road, but highway options and re-allocation of roadspace are possible. *Construct new path*.
- 37. If a new path is not built to the south of Linton Road junction modifications will be needed for a safe crossing of Linton Road itself near to where Linton Road meets the A1307.
- 38. Route can use section of former road. *Construct 3m wide path.*
- 39. For a new bridge to work negotiations are needed with the landowner to acquire enough land to construct paths, ramps and the bridge. Land will be needed along the A1307 boundary from 38 to Pampisford Road. Construct ramps and paths for new bridge. Consider potential bridleway usage, subject to sufficient space being available and landowner's agreement. Include link path to Pampisford Road for those using that road.











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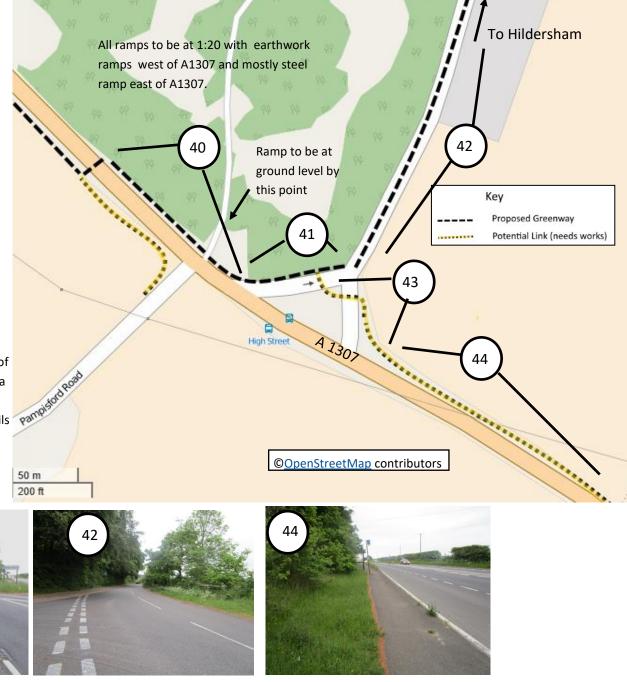
- 40. The ramp on the north-eastern side can be built on highways land , where an existing path is.
- 41. Widen existing path from 1.6m to 3m minimum, plus verge. Re-allocate road space as necessary and re-align junction. This is needed to create a two-way cycle route.
- 42. Route on road to village. *Remove centre-line and add cycle lanes. Consider changing road surface.*
- 43. Construct new path across junction for improved link with A1307 path.
- 44. Existing path besides A1307—see comments later.



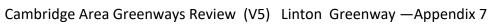
Tape set at 3.5m—the minimum width that would be needed for a

ramp.

A new bridge could span
between the raised land
behind the trees to the left of
the photo and connect with a
new ramp in place of this
existing highway path. Details
would need to be agreed.

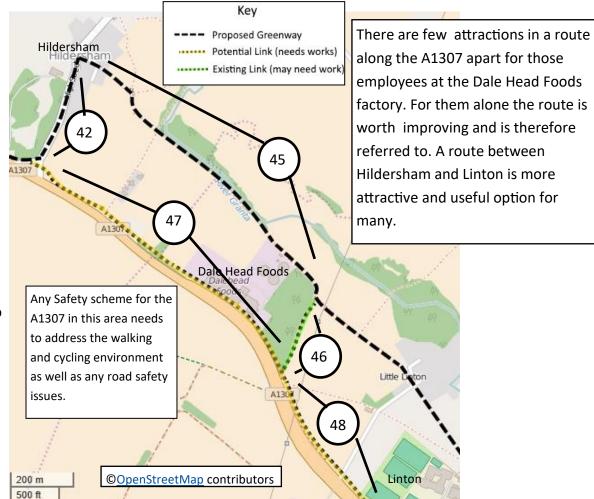


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- 45. Proposed route subject to landowner's agreement and planning approval. Approximately following the public footpath. There is a well used route along this alignment using mainly field edge paths and farm tracks. Subject to agreement improve and hard surface new path 2.5m or 3m wide. Consider potential bridleway usage, subject to landowner's agreement.
- 46. Route links to road/ bridleway at Little Linton.
- 47. In this area the A1307 path is narrow and adjacent to the carriageway. It will be unpleasant for users and parents are unlikely to want their children using a path like this. To widen the path it will be necessary to re-align the carriageway possibly using the layby space. Any path should be a minimum of 2m wide, plus at least 0.5m verge separation from the road.
- 48. In this area there is space to widen the existing path in existing verge.











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- Proposed route subject to landowner's agreement and planning 49. approval. Approximately following the public footpath. There is a well used route along this alignment between paddocks Subject to agreement construct new path 2.5m or 3m wide. Consider potential bridleway usage, subject to landowner's agreement..
- Route through Recreation area. Remove kissing gate at boundary and 50. replace with suitable bollards. Widen path to 3m through Recreation area. Surface path along whole length. (Path currently 1m width in places, 1.6m width in places).
- Route adjacent to cricket pitches. Widen to 3m from 2.5m.
- Replace barriers with suitable bollards and surface over whole length for 52. link to Meadow Lane.
- Linton Village Centre has 20mph limit.
- Widen path to 2m minimum. Re-align paths at signalled crossing and 54. amend crossing removing guard railing.
- Create shared use path along existing path surfacing path to at least 2m and linking with existing path. (Route is public footpath).



200 m

Key

Proposed Greenway

Potential Link (needs works)

Existing Link (may need work

Linton

Village

A130 College

creation pitches

Cricket

Linton

OpenStreetMap contributors

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Links

If the Sawston Greenway can be completed to a high standard including a new section along the disused rail corridor it is likely that this would be the main route for links between Cambridge and Babraham and would form the 3 Campus cycle route. The link to the existing Sawston-Babraham path is already existing and is relatively easily made.

A link with Fulbourn is identified in the Fulbourn Greenway section. An attractive route exists and can be ridden when the ground is dry and firm, but is not up to Greenway standard. The route could be upgraded, but is not considered a high priority at present.

There is an existing path besides the A505 that links towards Pampisford and Whittlesford Parkway. The route is to a good standard, but includes some tricky crossings and the off-road link does not continue all the way to Granta Park. The route has only been partially surveyed.

A 505 path (below)



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Existing Sawston link path from Babraham (above)

Existing byway towards Fulbourn (below)



Recommendations

- For Cambridge Biomedical Campus to Babraham:
 - Construct new link all the way from Dame Mary Archer Way,
 Cambridge Biomedical Campus to Babraham Road Park &
 Ride site approximately 1.5km.
 - Improve access crossings along existing A1307 path particularly at the Gog Magog Farm Shop and Wandlebury Country Park entrance.
 - Construct new refuge crossing of A 1307 by Copley Hill Business Park and new path south-west of A1307 north of Babraham Institute, for approximately 1.2km or re-align carriageway to south-west to allow wider path on north-east side.
 - ♦ Complete new Babraham village link through Institute grounds—approximately 1.2km
- For A11 Crossing:
 - ♦ Construct new paths for approximately 2.4 km to link Babraham High Street, with Granta Park entrance and Bourn Bridge Road and to link with the A505 path.
 - ♦ Construct new link from A11 crossing to new Park & Ride site if this goes ahead.
 - ♦ Complete new crossing of A 11 with the preferred option being besides the Granta, subject to further investigation.

- For Granta Park to Linton:
 - Construct new path between Great Abington and A1307 for approximately 750m.
 - Construct new bridge over A1307 near Hildersham as part of new Great Abington to Linton route.
 - ♦ Construct new Greenway between Hildersham and Linton for approximately 2.5km.
 - Construct improved path besides A1307 between Linton and Hildersham junction, as part of any road safety scheme

All are possible schemes within the A1307 City Deal project for delivery by 2020 and it will be important to make rapid progress with negotiations.