CHARLES JULY

The Chisholm Trail

A walking and cycling route from Cambridge Central Station to the planned Science Park Station, and a link between the Addenbrookes and the St Ives Busway cycling routes



Barnwell Lake from the end of the proposed path

Greater Cambridge City Deal Partnership

29th July Revision 2015











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A walking and cycling route from Cambridge Central Station to the planned Science Park Station, and a link between the Addenbrookes and the St Ives Busway cycling routes

About the Consultant

John Grimshaw CBE is a highly experienced civil engineer, founder of Sustrans and the architect of the National Cycle Network. Educated in Cambridge, John has had a long and distinguished career creating walking and cycling routes across the country. His current work includes advising on HS2 and as transport adviser to the Mayor of Bristol. His experience of the construction of urban greenways and the sympathetic use of former rail corridors means that he is able to offer a valuable insight into how the long awaited Chisholm Trail project could come to fruition.





Stourbridge Common



View of Busway cycle route near Cambridge Central Station



Stourbridge Common

Introduction

This document sets out the vision of the proposed route as a basis for making progress through the sequence of land negotiations, planning consents, specialist studies and actual construction.

First proposed in 1998, this cycling and walking route (known as the Chisholm Trail) is designed to connect together the two ends of the completed Busway routes, and to provide a direct and high quality connection to the two

stations. Its ambition is to become one of the core routes in Cambridge, both for walkers and for cyclists, and to be designed as a continuous and largely traffic free route for all levels of users and confidence.

On 28th January 2015 the project was included in the Greater Cambridge City Deal Project 5 years programme together with a committed budget.



Map showing the overall route from Trumpington and Addenbrookes to St Ives (26kms long) and highlighting the Central Chisholm Trail (3.5kms long)

The Proposed Route

The route shown here is the one selected after a careful assessment of all practical options. Its guiding objective has been to make as attractive and traffic free a route as possible which can appeal to every kind of user including everyday cyclists, novices, pedestrians and those with wheelchairs or buggies. It is essential that it has complete continuity through all road intersections and other barriers, and that its contact with vehicular traffic should be limited, and then confined to traffic calmed streets.

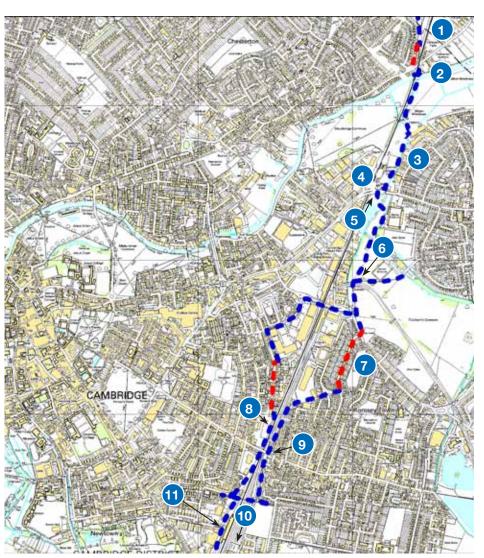
Whilst it is accepted that some improvements might be possible in the far future as the result of as yet unplanned development, the route does not rely on such eventualities but focuses on the optimum which should be possible now, or in the near future.

Even so the route shown here is wholly dependent upon the support and goodwill of a number of landowners including Network Rail, Cambridge City Council, Cambridge Past Present and Future, and Gonville and Caius College.

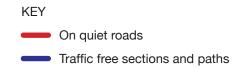
The outline of the route can be described as follows:

- Planned link to new rail station at Chesterton and The Busway cycle and pedestrian route to St Ives.
- New bridge over the Cam alongside the mainline railway bridge.

- 3 Cambridge, Past, Present and Future's lands make the crucial link between Coldham's Common and Ditton Meadows.
- 4 The Leper Chapel (Chapel of St Mary Magdalene) would become more accessible and enhanced by landscaping.
- 5 New access under Newmarket Road.
- 6 Existing underpass under Ipswich Line.
- 7 From Coldham's Common along Brampton Road or Cromwell Road and through the planned Ridgeon site development.
- 8 The route to the west of the railway line crossing the existing cycling bridge, links through the Beehive Centre, along Ainsworth Rd and along the edge of the City Council's Mill Road Depot.
- 9 Pass under Mill Road side arches on both sides of the railway, thereby avoiding dangerous crossings.
- Along the railway line to the Carter Bridge from Devonshire Road to Rustat Road.
- 11 From Carter Bridge to The Busway via the main Rail Station.



Map showing the proposed route of the Chisholm Trail from Cambridge Central Station to the planned Cambridge North Station at Chesterton

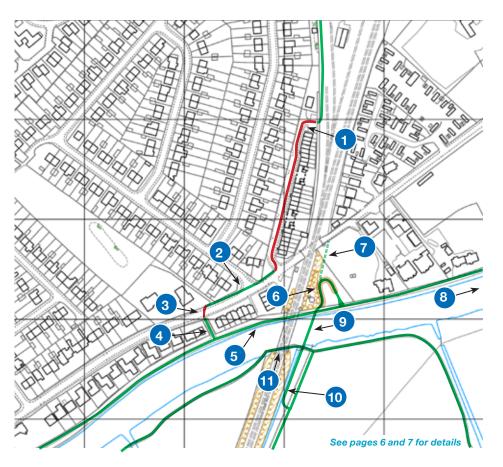


Notes on Chisholm Trail in more detail including sketches of key locations

Cambridge North Station to Ditton Meadows

- 1 The walking and cycling route to Cambridge North Station terminates at Moss Bank. This is a very quiet cul de sac.
- 2 Provide a route along the north side of Fen Road with a raised pavement crossing of Cheney Way.
- 3 Consideration of a raised crossing of Fen Road to calm traffic and define entrance to river.
- 4 Existing wide link to riverside. Remove gate and replace with bollards set 2m apart to prevent vehicular access.
- 5 Reconstruct and widen this short section of riverside path with asphalt surface up to new bridge access.
- 6 Link to new bridge with ramp long enough to achieve 1:20 gradient. The path should be wide enough to allow for slower travellers and if possible should use the Pill Box as a feature.
- Works access track 4m wide, to be used for construction and maintenance thereafter. It will not be open to the public in order to minimise any temptation to short cut via the level crossing.

- 8 Footpath link, 2m wide to Fen Road to be arranged further east from the towpath so as to be of value to local residents without any risk of encouraging a short cut to the station via the level crossing, as this is frequently closed for trains.
- 9 Proposed Abbey-Chesterton Bridge over the River Cam is a key component of the Chisholm Trail.
- 10 Ramp down to Ditton Meadows again with gradient 1:20.
- 11 The existing jetty under the railway linking through to Stourbridge Common is only 1.5m wide and has poor sight lines. This should be improved and a number of alternatives will be explored; one such solution can be seen on page 7.







Existing path on Ditton Meadows

Cam Bridge and Ditton Meadows

The path would run up the boundary of Ditton Meadows. It is suggested the railway is refenced with green weldmesh on the west side of the ditch in order to bring this feature into play with the Common. Note that the existing railway fence is set some way into the College land. Excavate out the blocked ditch as a wide compensation area. When the path leaves the Meadows a swing gate and cattle grid is required to control livestock.

Provide new path 2.5m wide along the existing desire line to link up to the former railway as shown.

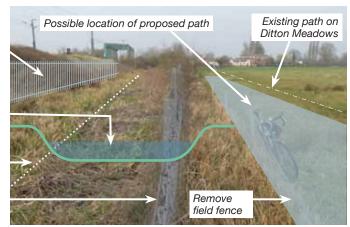
Former sidings to be used as the site compound during construction and then as the route for the link path.

Works access during construction to be via the existing fire access track, 4.5m wide. Suggested new fence

Clear out ditch for flood compensation

Boundary on plans

Remove existing railway fence which runs on the Meadows land



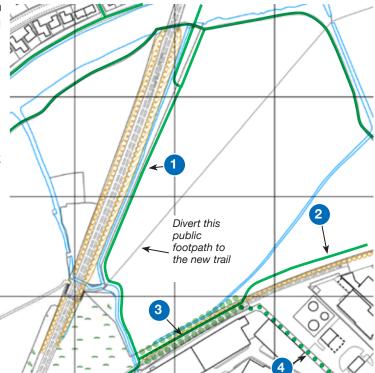
Meadows, looking north along railway boundary

Cambridge North Station Details (right)

- Reopen former railway access road – now a green lane, to provide a traffic free route through from Milton Road.
- Extend this greenway through the open space to reach the busway cycle route.
- Join the busway cycle route at a carefully worked junction across the end of the guided busway.
- Provide a defined link with a raised zebra crossing direct to the station approach.
- Route continues on Moss Bank to the riverside for the new Cam Bridge to Cambridge Central.







The Cam Bridges

The connection through to Chesterton Station and the start of The Busway route to St Ives requires a new bridge over the River Cam. This will be alongside the existing lattice girder railway bridge as close to the existing bridge as possible from where a good landing and ramp down to the riverside path can be created on a triangle of Network Rail land.

- 1 Ramps approximately 55m long (2.75m rise) could be shaped to smooth curves and planted as a natural bank.
- 2 Temporary works access 4m width for construction of the bridge.
- 3 50m span bridge as designed by architects.
- Widen existing riverside path with asphalt or suitable robust material as far as link to Fen Road.
- 5 Provide raised table crossing and oblique cycling zebra to reach north side of Fen Road.
- 6 Widen footway to 3-3.5m for shared use in the limited space available.
- 7 Raised priority crossing at Cheney Way.
- 8 Continue widened footway by negotiation offering the land shown shaded by way of

- compensation to the shortening of the drive.
- 9 Moss Bank, quiet residential cul-de-sac links through to the station entrance planned in the current scheme.
- 10 The path could ramp down adjacent to the railway embankment. Excavate ditch to new alignment. Join Chisholm Trail and connect to riverside path.
- 11 The railway boundary fence intrudes on the Common.

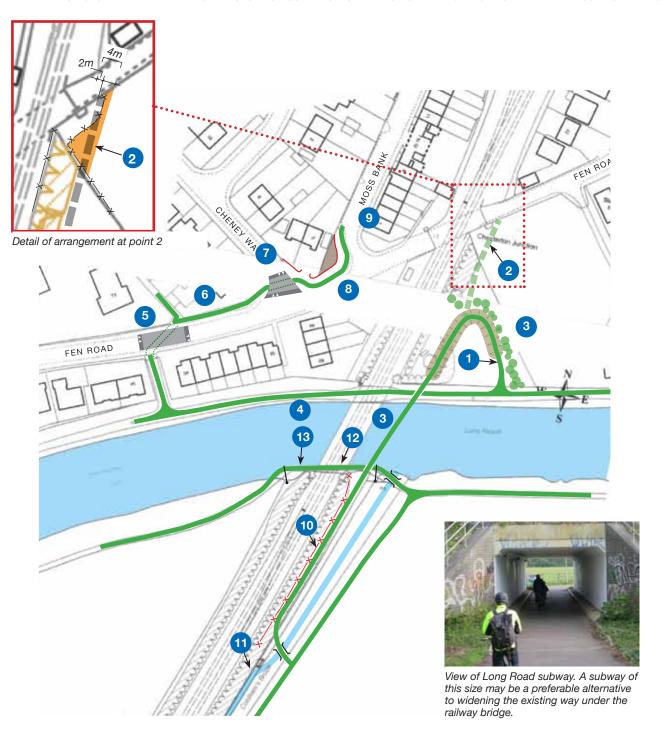
 The railway could be re-fenced with green weldmesh behind the Brook. This would enable the field ditch to be properly maintained. At present it is clogged and as a consequence of poor drainage the Meadow is marshy.
- 12 The existing jetty walkway under the railway is narrow, with poor sight lines. If possible this should be widened and raised clear of the water, as shown in the option sketch. An alternative would be to investigate the opportunity to create an underpass through the rail line.
- 13 The approaches to the section under the railway should be rebuilt to give enhanced sight lines for security.



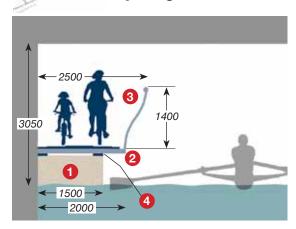




View of narrow link under railway bridge



Sketch showing widened jetty option under the railway bridge



- 1 The existing jetty is only 1.5m wide and should be replaced.
- 2 A new steel deck 2.0m wide is the bare minimum to enable this riverside route to function.
- 3 Design swept balustrades to give 2.5m width at handlebar level.
- 4 Foundations or supports not to protrude more than the existing 1.5m.

Linking Ditton Meadows and Coldham's Common

Creating a green corridor

- 14 Link path to be constructed over the former railway after the site compound is cleared away.
- 15 Substantial brick built railway culvert to remain and be utilised as feature of the Chisholm Trail.
- 16 Triangular wood to be managed as a natural woodland wildlife site.
- 17 Possible delivery route for bridge.
- 18 The path through to Newmarket Road would ideally follow this field edge taking care to keep any vegetation on the side of the Brook to screen properties opposite. A new stock proof fence could be used throughout the length if appropriate. This route is preferred to following the line of the remaining railway which would be much more intrusive to the old station building and its occupants. even though it could be screened if required. The land between "X-X" on the map is currently subleased to the Station House owners.
- 19 Malting's Close has recently been constructed close to the banks of the Brook; screening here will mask the path and its users.
- 20 The Chisholm Trail will pass quite close to the Leper Chapel and will give the opportunity of introducing the public to this historic building. New link paths will provide level access for those who need it.

21 Newmarket Road is a principal traffic and bus priority route where the current light controlled crossing near Coldhams Common does not have the capacity for increased usage. The proposed underpass will provide more suitable passage for cyclists and walkers alike, and its careful orientation could create a view of Barnwell Lake. The proposed position of the underpass will fit with the levels as the road rises up.



View of new bridge under Long Road

22 This area could be developed with a series of public facilities including a car park, publically accessible toilets, café and restaurant all to act as a central base for the public visiting the Chapel, Coldhams Common and Ditton Meadows.

- 23 The path should curve around this short section of the lakeside with some public seats in order that visitors and locals can enjoy the water. This will slightly reduce the length of the bank available to fishermen, and their remaining circumference should be gated off from the general public.
- 24 Cross the Brook on a short culvert of the same diameter as the one under the Newmarket Road. This will complete the Greenway Link between Ditton Meadows and Coldham's Common.
- 25 New link across the grass to join the line of the existing path and cycle route. This path should continue with a width suitable for all to use safely. A new cattle grid and a swing gate will be needed at the end of the culvert.
- 26 The surface of the existing path is only 1.8m wide and is rather bumpy to ride. It should be widened to 3.5m (to the east away from the existing lighting columns) and resurfaced. As this is a shared use path in a rural setting, it should be free of highway paraphernalia such as lining and signing.

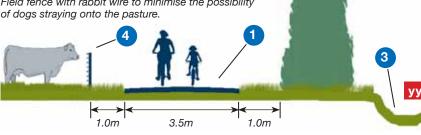
Linking Ditton Meadows and Coldham's Common

Options discounted include:

- Route through scrap recycling yard and Stourbridge Common on account of poor quality of potential route;
- Route along the unused branch line on account of its intrusion into the privacy of the adjacent housing;
- Route via existing toucan crossing on account of poor quality of road crossing;
- Via Ditton Lane which is now very built up, and will have an unpleasant section adjacent to the main road and a difficult crossing.

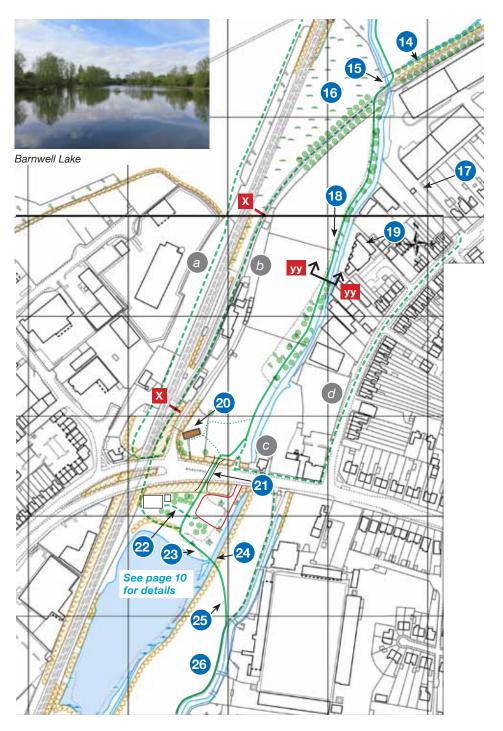
Sketch section through path along edge of pasture

- 1 3.5m wide path laid slightly proud of grass field level so as to drain dry at all times. Average verge width of 1m to be mown to enhance wild grasses and flowers
- 2 Maintain, and extend if necessary, hedging and scrub so as to shield adjacent properties over the brook.
- 3 Coldhams Brook
- 4 Field fence with rabbit wire to minimise the possibility of dogs straying onto the pasture.





View through proposed subway showing Barnwall Lake beyond: 2.8m headroom

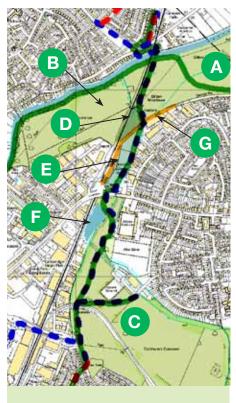


Cambridge Past, Present & Future and the Barnwell Fishing Lake



Cambridge Past, Present and Future holds the key to linking Ditton Meadows with Coldham's Common, and to linking Cambridge and the new Chesterton stations. The Leper Chapel Meadows form the open wedge of land which provides the open space and parkland connection between these wide open expanses of the meadows and commons either side.

Newmarket Road forms the only barrier to a continuous green corridor, and it dominates the historic Norman Chapel of St Mary Magdalene, known locally as The Leper Chapel, isolating and preventing it from being a well-known and appreciated fragment of Cambridge's history. The sketch here shows how the Chapel could become a focus of a popular public space, rather than being overshadowed by the main road as at present.



Map of the green spaces around the Chapel

- A Ditton Meadows
- B Stourbridge Common
- C Coldham's Common
- D Barnwell Junction Wood
- E Leper Chapel Meadows
- F Fishing Lake
- G Disused Barnwell Junction line

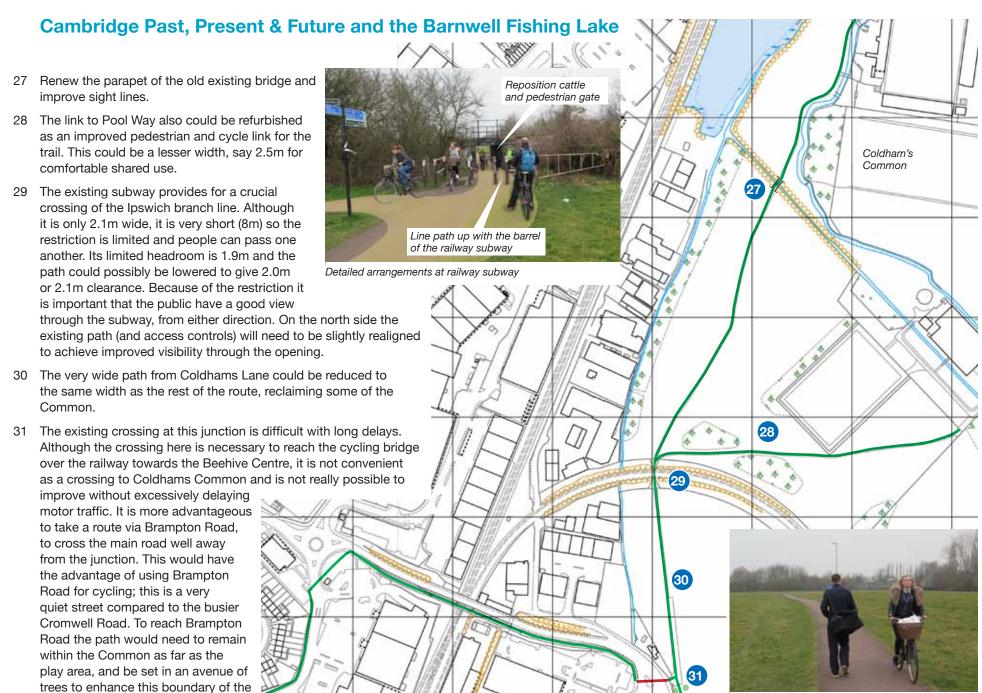
Sketch of possible approaches to the Leper Chapel and the crossing of Newmarket Road

- A The underpass is arranged to be at the point where the road has risen sufficiently whilst at the same time to be well away from the Leper Chapel.
- B If the existing hedge were removed then a larger lawn could be created to host the Stourbridge Fair, and new link paths could connect to the Chisholm Trail. The overgrown field access from the Newmarket Road could be reconstructed with an easy gradient to provide access to the Chapel for all abilities.
- C Maintain a view looking out over the Meadows to the Chapel but plant against the brook side to screen nearby properties.
- D Possible car park for fishermen and visitors to the Chapel.
- E Bring the Chisholm Trail to the lakeside here so that the public can enjoy views of this expanse of water. Provide gates to the fishermen's paths in either direction.
- Consider developing a restaurant/café to provide a focus for the whole route and plant up whole of the remaining area as a woodland to mask the traffic noise and to provide an



- avenue approach to the bridge under the main road and to the Chapel.
- G The Leper Chapel could be opened on a more frequent basis.

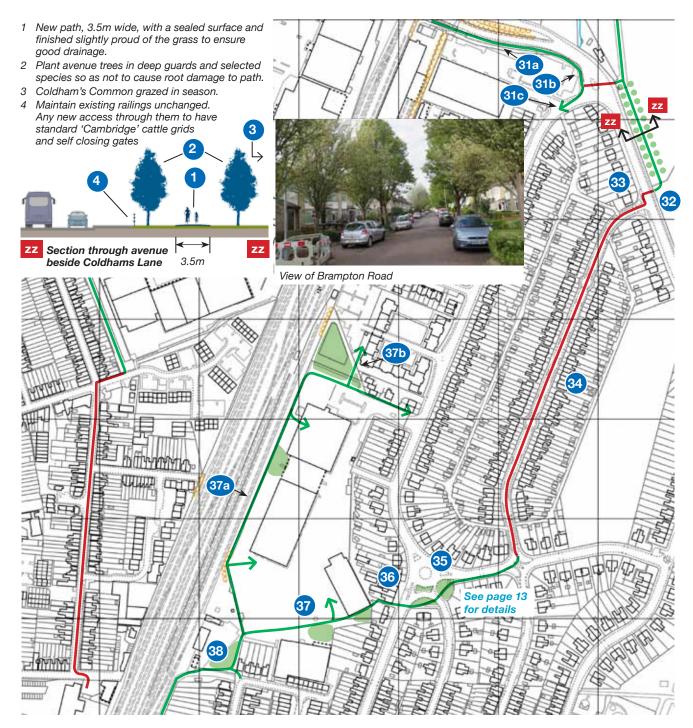
Common.



View of path across Common

Coldham's Common to Ridgeon's

- 31a Existing good cycling path and bridge over railway.
- 31b Widen the pavement space here by taking some of the landscaping so as to create space for cyclists waiting to cross on the lights.
- 31c Make clear connection to Cromwell Road for cyclists travelling in either direction.
- 32 Because of poor accessibility the play area is currently rather low key; with a crossing in place at Brampton Road it could be a more attractive destination for families. So included in project are provisions to refurbish this area.
- 33 Cross the main road on a raised zebra crossing. This will create a minimum of delay to all users. At busy times the traffic stacks back from the Cromwell Road junction and is often stationary. Another option to be explored could be a toucan crossing
- 34 Brampton Road is an attractive low use road with maturing avenue trees both sides, so makes for a visual continuation of the green route. The road is traffic calmed with road humps that could be made more cycle friendly.
- 35 At the end of Cromwell Road, complex road barriers ensure traffic flows are minimised and there is space to fit in a dedicated traffic free link as far as the shops, with raised zebra crossings at each link road. This work will further emphasise the importance of walking and cycling in this local neighbourhood.
- 36 The back lane here provides a link to Ridgeons where its redevelopment can provide the final railway link to Cambridge Central Station.



Coldham's Common to Ridgeon's Link

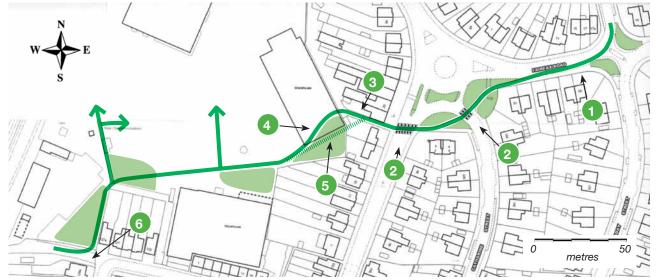
- 37 The link should be designed as an integral part of the overall development. Note that this important link should be open to the public within 12 months of start of work on site. It should be built first, not last!
- 37a The Ridgeon's development will need to provide a route to feed its residents to the Chisholm Trail through Cromwell Road to provide passage to the retail centre.
- 38 Create a path on the boundary of the railway depot, and a link to Cavendish Road.

Note: if there is a delay on the Ridgeon's Development, negotiate a temporary link through the archway from Cavendish Road.





36 View of back lane



Brampton Road to Ridgeons Link

- Narrow road to create 2 way cycling route
- Widen existing paths and make revised zebras across Catherine Street
- 3 Use back lane
- Incorporate path and open space in Ridgeons development
- 5 Possible link if Ridgeons building remains
- 6 Link to Network Rail access

The Mill Road Crossing

- In order to overcome the dangerous crossings of Mill Road, access to Network Rail land is key, both east and west of the road. For the whole way through to the station cycling bridge there is a good very lightly trafficked Network Rail access road (less than 50 vehicles/day definition of a traffic free route). It will need to be fenced throughout, with gates positioned as appropriate for railway access.
- 40 There are a number of side arches to choose from to pass under Mill Road.
- 41 A short link will be required through the small car park for community access.
- 42 On this side link through the current access gate to Argyle Street.
- 43 This last section of accommodation road runs past the washing siding and overhead cable columns. If necessary each column could have additional insulating sheeting incorporated into the fencing.
- 44 The connection to the Carter Bridge will be ideally done by means of a new ramp at the same gradient joining into the bridge at the end of its covered section. At least one convenient link into William Smith Close is required for local people.



Montage of new ramp to Station Bridge



View of railway access road

- 45 Cyclists can continue along the traffic free road to reach Clifton Road Industrial Estate and the existing link onto Rustat Road or onwards to the leisure centre.
- 46 A new ramp link through to the Station is planned as part of Cambridge Station redevelopment.

This then links to the busway route across the station square, onwards to Addenbrookes Hospital and Trumpington.



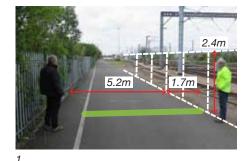
These pages set out to show how the final crucial sections of path leading up to Carter Bridge and Cambridge Station need to be arranged.

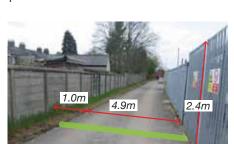
The Chisholm Trail Project Group photographed and measured the various sections shown here under the supervision of Martin Dawson (Network Rail Asset Team) on May 1st 2015. Most of the section is currently a lightly used works road with a good tarmac surface. It is proposed to fence this road off throughout its length with 2.4m high palisade fencing fitted with locked gates wherever required by the railways.

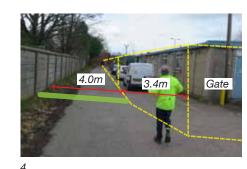
For most of the length the public would be sharing the access road with maintenance vehicles, except for selected sections where there is space or requirement for separate roads. The Council would use this land under Network Rail's standard Licence Terms and would accept full liability for the public on the route.

The location of each photograph and montage is shown on the map. Particular care is needed to ensure that railway staff have complete access to the steps either side of Mill Road Bridge.

- This is the first of a series of montages starting at the northern end on the east side of the railway. This picture is looking south from just after the railway offices off Cavendish Road. The width shown in green is the area of road which would be used by the public and Network Rail service vehicles. As can be seen there is ample room for the public to pass a vehicle. The existing marked pedestrian strip would be maintained to indicate which side the public should move to in the event of a works vehicle coming through.
- In this view by the site offices there is room for a dividing fence. The public and railway service vehicles would pass to the left, whilst parked vehicles could stand in front of the buildings.



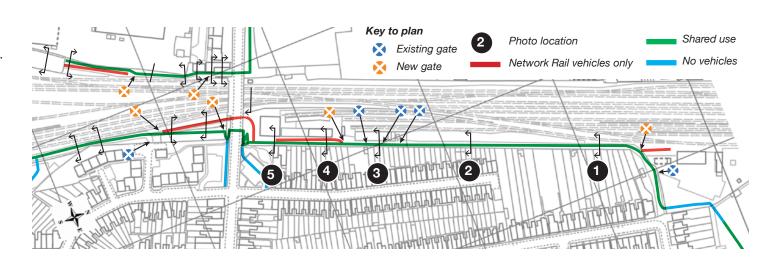




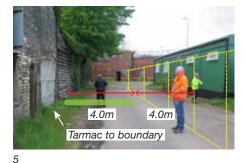
4.9m

2.4m

There would be an oblique gate in the palisade fencing to give access from the road to the works area. Key to photos 1-19Width of proposed Chisholm Trail path← Key dimensions



- The public would use the first separate arch to the east of the works arch (the one to the left of this is restricted in size at its south end), leaving vehicles to have separate passage of their current route.
- 7 The path would run in the "spare" land to the west of the existing track. The existing gates could be removed but a pedestrian gate would be provided in the new palisade fence for the railway staff to reach the Mill Road steps.
- 8 The path would pass behind (or over if necessary) these manhole covers, and the gas and electric boxes re-sited.
- 9 Even this narrowest point would provide 3.9m clearance between fences. The palisade fence would line up with the crash barrier and



3.9m

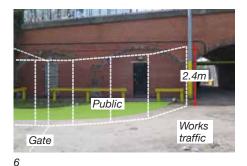
5.4m

Path to skirt manholes.

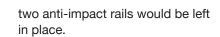
Move cabinets

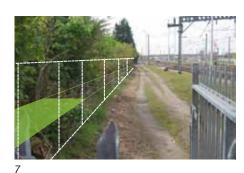
be set the same distance (1.8m) from the nearside rail.

10 The fence would be set 0.36m from the overhead post and the

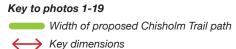


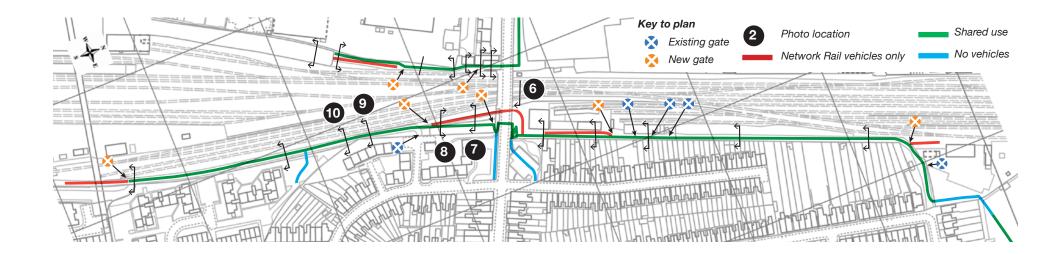
3.9m 1.0m 1.8m







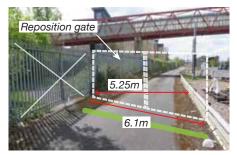




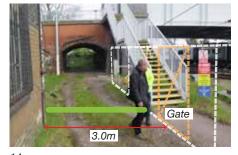
- 11 The road soon returns to its full width.
- 12 The cycling and walking route also continues along the wide almost unused Railway Access Road belonging to the Council. Use of planting could enhance the wider sections such as this.
- 13 On the north side of Mill Road, the path would pass through the arch to reach the Council depot. The gates visible in the picture would be removed, and just beyond the existing line side fencing replaced by steel palisade. On this side of the bridge, the fence needs to be 0.9m clear of the cabinet, with an access gate, unless it is better to relocate this recently positioned cabinet.



- 14 A side gate is required to give railway staff access to the steps. It would be useful if it was possible to make these steps safe for a convenient pedestrian route to the station.
- 15 The fence needs to be set 1.0m off this overhead line post to allow for the isolating levers, and the fence to be provided with a gate for convenient access to the controls.



12



3.2m 1.0m 15

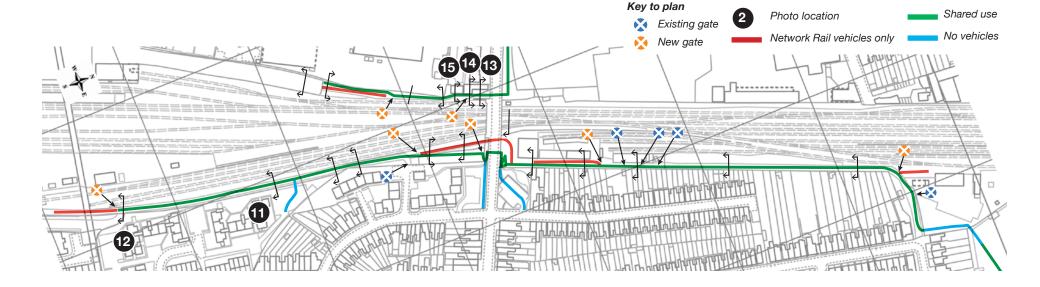
4.2m

13

Key to photos 1-19

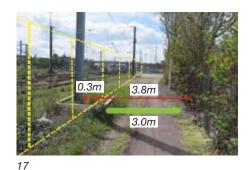
Width of proposed Chisholm Trail path

←→ Key dimensions

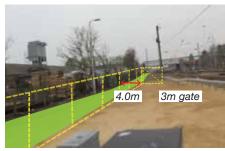


16 This corner of Travis Perkins land is to be made available for the path.

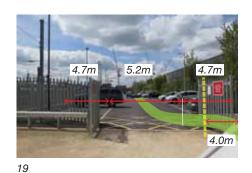




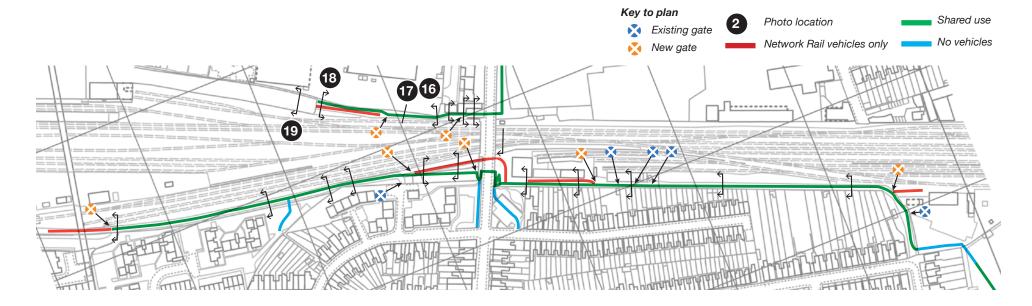
- 18 Over this section the public to use a 4m width on the west side of the land. There would be an access gate for Network Rail at the far end.
- 19 Mark a central aisle for walkers and cyclists through the car park. Safety would be further enhanced if reverse parking was made mandatory.



18



Key to photos 1-19 Width of proposed Chisholm Trail path ← Key dimensions





The western side of the railway line, Coldham's Lane to Cambridge Station

This key route along the north-western side of the railway from the Beehive to Central Station passes under Mill Road, avoiding the accident cluster site of **Kingston Street Junction**

- The existing cycling bridge over the railway on Coldhams Lane stops abruptly short of the Beehive entrance. It needs to be continued through the ornamental landscaping here to reach a convenient crossing point of the Estate access road.
- Provide a raised zebra crossing here to reach the existing shared use route.
- This existing route is generally quite good, although some small improvements may be possible.
- Clear back all vegetation from this blind corner.
- Asphalt the concrete back road here and consider planting a few trees in the houses boundary fence. This route is considered better than using the narrow route along York Street.

- Follow Ainsworth Street. On the sections where there is parking on both sides. consideration should be given to reducing it to just one side.
- At Hooper Street go across the end of the Women's Resource Centre space, rearranging gates and fences as necessary.
- Then make a 5m wide corridor along the boundary of the City Depot, by repositioning stores and removing life expired buildings. This utilitarian route needs to be fully incorporated into any eventual redevelopment of this large site.
- Pass under a side arch to give a safe link to Mill Road via the existing track past the former library building.
- 10 Fence off the railway as far as the car park incorporating gates for all necessary railway operations.
- 11 Accept the 3m wide space past the WWII hardened brick transformer structure, but bring forward the use of the small triangle of land provided by Travis Perkins S106 agreement. Ensure that its redevelopment provides a good connection here.

- 12 Mark up the walking and cycling route down the centre of the railway car park. Even though vehicle movements are few (and none at all for most of the day) it would be an added safety measure to require cars to be reverse parked here.
- 13 Connect with the Carter Bridge route and way through to the station.



View of gap north of Mill Road



View of space through Station car park



Land ownership

Considering the ambitious nature of this part of the Chisholm Trail there are surprisingly few landowners involved. However, all of these are vitally important. At the present time (May 2015) the landowners whose support is required are as follows:

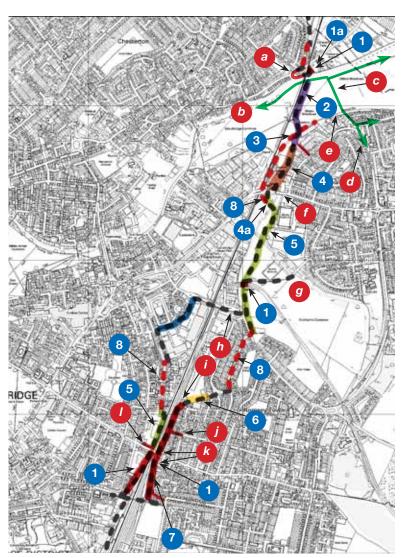
- 1 Network Rail: the triangle off Fen Road, the relocation of the boundary fence along the side of Ditton Meadows, the crossing beneath the lpswich Line via the existing subway, use of the access road beside the sidings to pass under Mill Road on its east side, and use of the car park and side arches to pass under Mill Road on the north side.
- 1a Fragment from developer for link to road and works access.
- 2 Gonville and Caius College for the path across Ditton Meadows.
- 3 DB Schenker and Network Rail for the disused Barnwell Sidings.
- 4 Cambridge Past, Present & Future for the Leper Chapel Meadows and landscaped approach to Chapel.
- 4a Cambridge Fish Preservation Society lease from private party.
- 5 Cambridge City Council for Coldham's Common and their City Depot and access through Great Eastern Street car park.
- 6 Ridgeon's, link in their redevelopment plans.
- 7 Housing Cooperative for any link from the railside path to the public roads south of Mill Lane.
- 8 Cambridgeshire County Council for sections on public highway and crossings.
 - Others include; Beadle Industrial Estate, the Beehive Centre, Travis Perkins

Links

- a Fen Road for Link
- b Existing Jubilee path towards the City Centre
- c Existing Ditton Meadows path
- d Existing Wadloes Road access
- Link along desire line on edge of Meadows and the end of the former railway
- f Links to either side of Newmarket Road
- g Existing link to Whitehill Road
- h Link at Coldham's Lane traffic lights to cycling bridge over railway
- i Link to end of Cavendish Road
- j Through Cavendish Road archway for direct connection to Greenway
- k Links either side of Mill Road, first to Great Eastern Street, and then to Argyle Street
- I To Mill Road adjacent to former Library

This preliminary schedule will extend as other details and links emerge, but the list above covers the main players.

The nature of the land agreements will vary depending upon circumstances. Network Rail, for example, already have in place a Licence format for paths on their operational lands which caters for unforeseen operational arising.

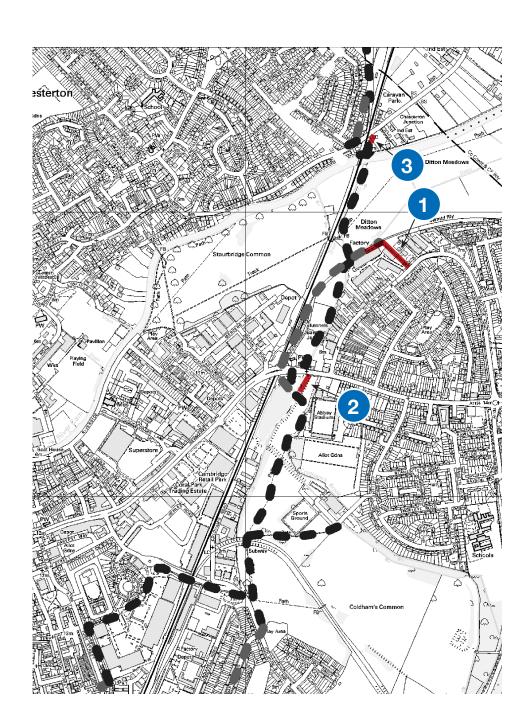


Map showing location of landowners

Works Access and Compounds

It is important that the work is organised with the minimum of wasted effort or disruption. In this case there will inevitably be a number of working phases, but the key locations will be as follows:

- The Beadle Industrial Estate, off Ditton Walk, must be the optimum location for the works access from Newmarket Road to the Cam, including the bridge construction works. Their fire access road gives a convenient route through to the old railway sidings which would make a convenient site compound. The stone base for the path could initially be constructed 600mm thick to take bridge construction traffic, and then once this work is completed, half the stone removed to build the route on to Newmarket Road.
- The waste land at the Fishing Lakes will make a convenient base for constructing the Newmarket Road underbridge.
- 3 A temporary access track is required from Fen Road for the construction of the bridge supports and paths on the north side of the river. Again the construction compound could be fenced off and landscaped upon completion of the works.



Programme of Construction and Opening of the Chisholm Trail

Standards and details

The project can be divided into a number of distinct phases for construction, in that it is worthwhile opening self-contained sections which can be of use to the public as soon as they are completed. The principal sections are as follows:

- Newmarket Road to Coldham's Lane including the raised zebra crossing or controlled crossing to Brampton Road.
- 2 Renewal of traffic calming on Brampton Road and creating dedicated greenway link around the end of Cromwell Road to Sedgwick Street.
- 3 The link from Coldham's Lane to the Beehive Centre cycle and pedestrian track could be implemented at any time.
- 4 Fen Road, the Cam Bridge, Ditton Meadows through to the Newmarket Road should be seen a single piece of work.
- Newmarket Road underpass would be best included in 4 above, but could be separate including the landscaping around the Chapel and the link past the Fishing Lakes.

- Ridgeon's to Mill Road arches with the new ramp up to the Carter Bridge depends upon the Ridgeon redevelopment but could make use of a link off Cavendish Road in the interim if needed.
- 7 The Mill Road arch on the northwestern side can come forward as soon as a strip on the City Council depot is made available.

The programme, over perhaps 4 years, should allow for progress as and when each section is brought to a position ready to start. It may be best to make a single planning application for the whole project in order that the public can appreciate the extent of the scheme.

Ecological and heritage surveys should be put in hand as soon as possible on case they dictate significant revisions.

Whilst a topographical survey will be required for the Newmarket underbridge and its approaches, including the environs of the Leper Chapel, for most of the rest of the route no significant level changes are envisaged. Cambridge has examples of excellent routes, surfaces and details. As far as possible these should be used as the public will be familiar with them. Continuity of route is essential and in this respect the approval of cycling "zebra" crossings - "tiger" crossings - is welcome, especially where used in conjunction with raised pavement crossings. Further details will be added to this draft document as the project evolves.