Derwent Valley Cycleway – a Multi-Use Trail:

Belper West Bank Section

Planning Application: Design and Access Statement

rev. TW 05.09.2024

For an overview of this project and planning application, please see the Introduction document.

Contents

For brevity, the *Derwent Valley Cycleway – a Multi-Use Trail* is referred to simply as *the cycleway* in this document.

Abbreviations: DVT – Derwent Valley Trust. RoW – Right of Way. ST – Severn Trent.

"Promoting sustainable access within the valley"

DERWENT VALLEY TRUST

WALKING | CYCLING | PADDLING | RIDING | ART

1. Design

1.1 The Route

The map of the cycleway route is shown in Figure 1. Broadly, it follows a series of paths or lanes already in place; this statement describes how this existing route is to be upgraded to a full cycleway. Alongside the application is a need to adjust some Rights of Way (RoW), see Section 1.2. The end points (Points A and D in Figure 1) allow ongoing connection to the overall cycleway as it stretches north and south. At the northern end, cyclists and other users can cross Bridge Foot and continue to Wyver Lane. While the present plan links the southern end to Chevin road, it is intended in future to implement an off-road route into Milford.

This document section describes and pictures the route as it currently is, and explains the planned upgrades.

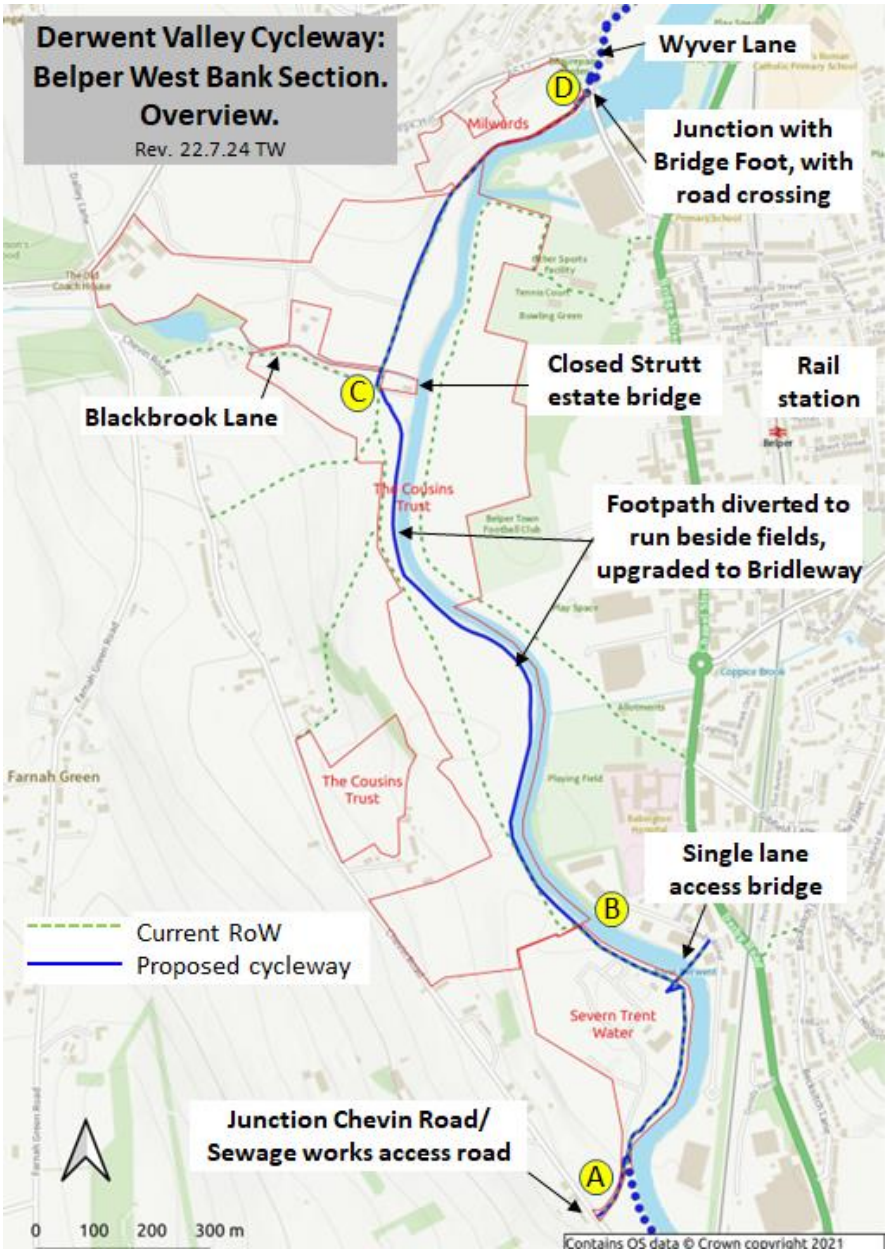


Figure 1: Map of Proposed Route

The route can be divided into three sections, as summarised in Table 1.

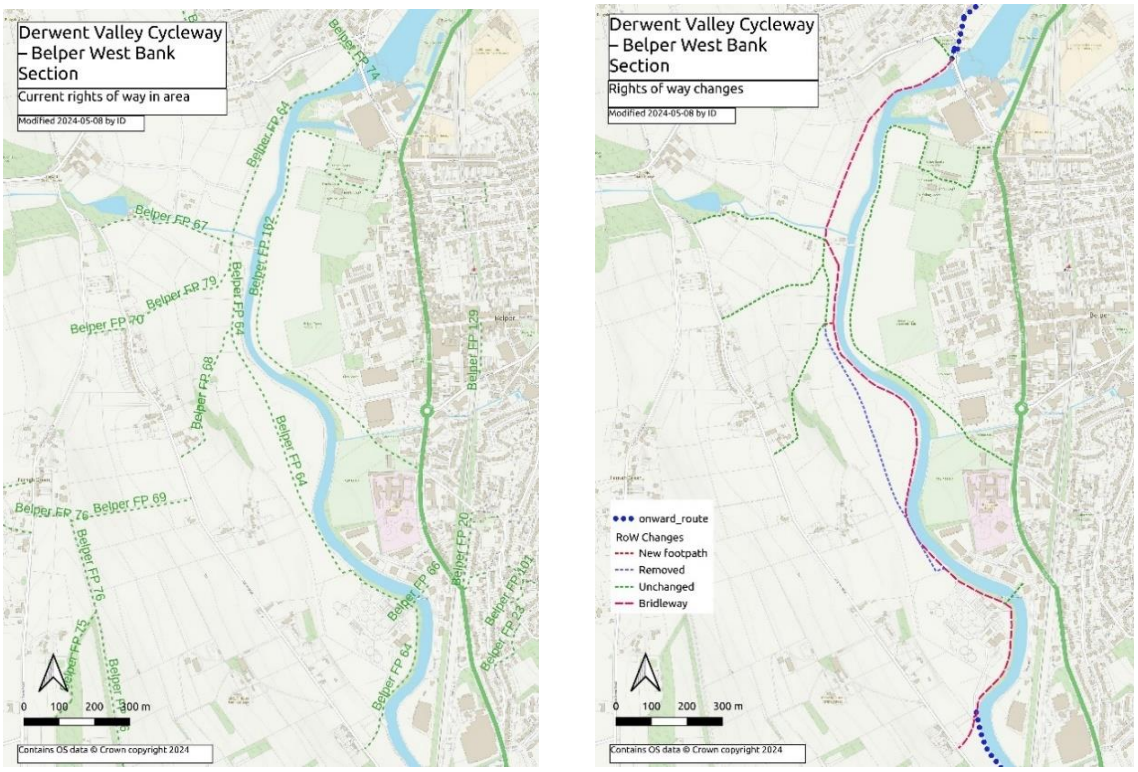
Section	Description
1. A to B	The route leaves Chevin road, following the access lane to the Severn Trent (ST) sewage works. Leaving the lane, it then goes alongside the works, and through the neighbouring woodland. The land is owned by ST.
2. B to C	The route emerges to run beside agricultural fields, near the river. It then angles away from the river and reaches Blackbrook Lane, which leads to the currently closed Strutt Estate bridge. The Cousins Trust owns the land, with a tenant farmer in place.
3. C to D	The route leaves Blackbrook lane and stays around a hundred metres from the river. It crosses Black Brook, runs between fields, then joins a well-made ST access road. It passes a ST pumping station and then returns to the river, along a pathway leading to Bridge Foot. Land ownership is mainly the Cousins Trust, with the northernmost section of unconfirmed ownership.

Table 1: Route Sections

There are two potential further access points to the route, by bridge over the Derwent. One is the ST bridge to the sewage works from Goods Road. This is a narrow single-lane vehicle bridge, which links to the route by a steep flight of steps; it is designated as a footpath. The other is the closed Strutt estate bridge about 1 km south of Bridge Foot. Reliable cycle access across either or both would enhance access to the route, but are not part of this application.

1.2 Proposed Adjustments to Rights of Way

An essential part of this application is that the route of Belper Footpath 64 is moved to run close to the river, as illustrated in Figure 2, and that it is upgraded to bridleway status. An application to this effect is being made to the County Council. Walkers are already abandoning a section of the official path, and follow instead the route beside the fields. There are certain other minor changes also being applied for, these appear in Figure 2b) but do not impact on this application. All are tabulated in Appendix 1.



a) Present RoWs **b) Proposed revised RoWs**

Figure 2: Proposed Adjustments to Rights of Way

1.3 General Design Features, and the Use of Design Guidelines and Specifications

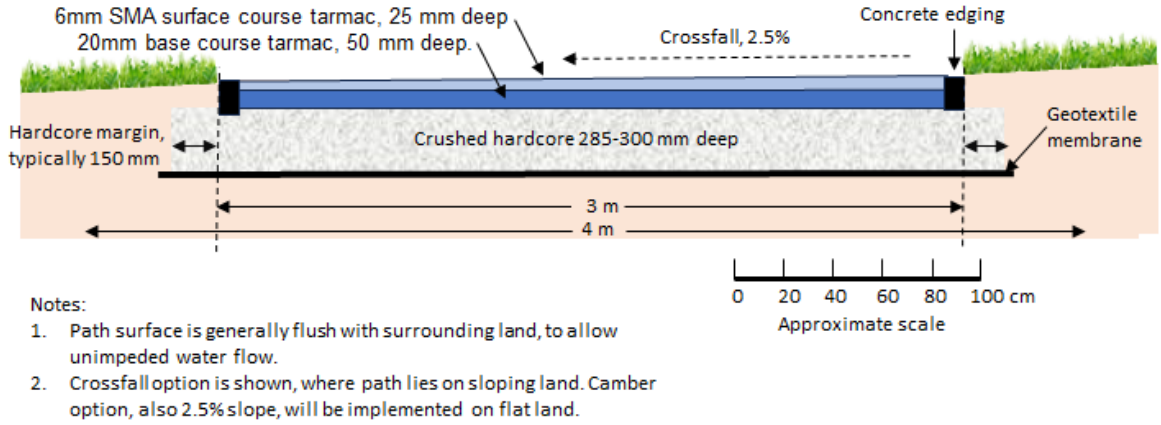
The cycleway design and construction follows guidance from:

- Sustrans traffic-free routes and greenways design guide (Reference 1);
- Cycle Infrastructure Design. Department for Transport, Note 1/20 (Reference 2).

This adherence will lead to a quality cycleway of national standard, ensuring its eligibility for inclusion in the National Cycle Network. The standards are also adopted by Derbyshire County Council. Applying these guidelines, key cycleway features are:

- It will be open to all users who are legally permitted to use a Bridleway, including all cycle types and wheelchairs (noting a wheelchair width clearance requirement of 90 cm).
- As a non-urban and primarily recreational route there will not be delineation between separate user types, e.g. cyclists and walkers (hence it will be similar to the High Peak and Tissington Trails).
- It will consist predominantly of a 3 m wide pathway, with occasional minor width reductions. Localised restrictions arise from gate passing places, fencing or bollards.
- The surface will be bitumen (or a resin bound gravel alternative), except where stated. Where it runs in the open the colour will be modified by use of surface dressing to minimise visual impact. To save cost, this will not be done when the cycleway is among trees, e.g. beside the sewage works.
- Any access controls will minimise the need for cyclists to stop and start, and will not inhibit any legitimate cycleway users.
- Maintenance requirements will be kept to a minimum.
- The route lies in a flood risk area, and seasonal flooding is expected. Hence the construction, and any fencing required, will be flood tolerant, including the use of pre-cast concrete path edgings.
- Signage along the route will give clear guidance on wayfinding and cycleway use, including safety information.

The general design of the cycleway will align with Figure 3a). However the accompanying *Tree Survey and Method Statement* identifies three trees whose roots may be adversely affected by the construction of the trail, and recommends a “no dig” approach to construction in their vicinity. The trail route will therefore be adjusted slightly away from these trees, to avoid root encroachment. If this is not deemed adequate following arboriculturalist advice, then the *Cellweb*^{TM} *Tree Root Protection System* or similar product will be applied in the immediate tree vicinity. An indicative image taken from the tree report is shown in Figure 3b). Adjacent trail sections not requiring root protection measures will be sloped up to match the root protection portions.



a) General Cycleway Design

b) Application of Cellweb^{TM} Tree Root Protection System over Vulnerable Root System

Figure 3: Proposed Cycleway Design

A cycleway implementation similar to Figure 3a), recently constructed in Derby, is seen in Figure 4.

Figure 4: Impression of actual Cycleway Style (Darley Abbey)

1.4 Details of Cycleway Design

The following sections detail planned construction for each of the three sections indicated in Figure 1 and Table 1.

1.4.1. Section 1, From Chevin Road, past Severn Trent Sewage Works

A detailed map showing this section appears in Figure 5. Descriptions below relate to points identified on the map by circled numbers.

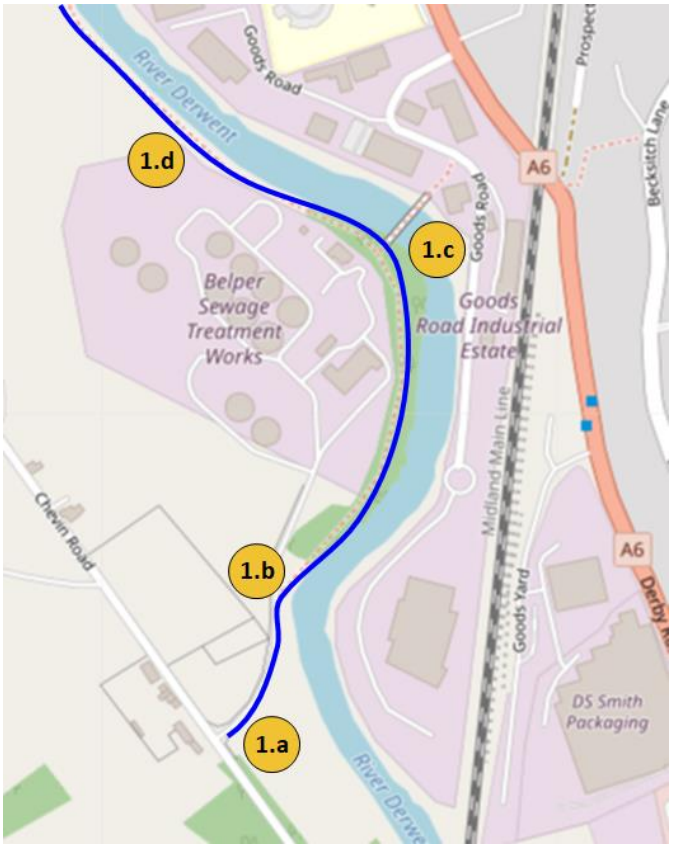


Figure 5: Section1, Detail Map

Points 1.a to 1.b

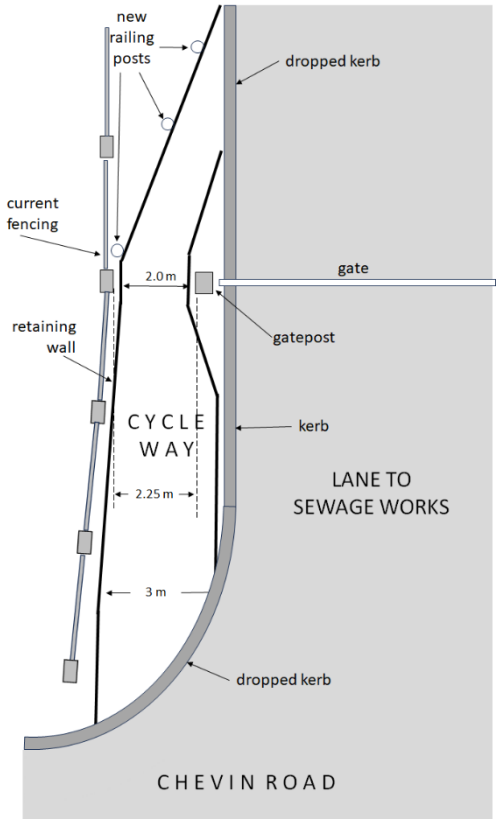
Comment: The access to the ST sewage works from Chevin road is a well-surfaced lane, used occasionally by ST vehicles. It is also a designated footpath. The road surface is quite adequate for use by cyclists and walkers. A gate towards the top of the lane (Figure 6) is normally locked. Current access for pedestrians is to the left of the gateway; however the ground here falls away steeply towards the neighbouring fence.

Action(s)

Remove and relocate sign board by gate. Bank up the ground to left of gateway, possibly with small retaining wall, to be level with the roadway. Construct surfaced pathway, starting at Chevin road, running between left gatepost and fence, to approximate plan shown in Figure 6c). Safety railings are installed below the gate, with kerbstones dropped to provide smooth access from road to path on both sides.

a) General View

b) Detail



c) Proposed Cycle and Pedestrian Access Path to Left of Gate (not to scale)

Figure 6: Gate at Top of Severn Trent Access Road

Points 1.b to 1.d

Comment: The path goes through a narrow stretch of woodland, and then runs alongside the sewage works perimeter chainlink fence. Approximately 3m from this, and parallel to it, is a low, partly overgrown and broken-down wire mesh (150 mm) fence. This marks an approximate delineation between more mature tree growth on the river side, and recent scrub and young self-seeded trees beside the path. There are periodic accesses to fishing locations.

At point 1.c the cycleway passes under the ST access bridge from Goods Road, with the ST perimeter fence forming a V-shaped indentation to accommodate it (thus the path is in this region away from the ST fence). Pedestrian access is available to the cycleway on the west side up a ramp and/or steep flight of concrete steps. Members of the public may choose to use this as an access to the cycleway (as they already do to the current footpath), but it is not endorsed as such. In this region the pathway passes closer to one or two mature trees, with prominent roots. Its route can be adjusted to avoid these.

Action(s)

Apply all guidance given in Appendices 10 and 11 of the accompanying tree survey, for example in relation to protecting roots of nearby trees, and making minor route adjustments to avoid the few mature trees. Clear scrub growth to a width of 3m (in general up to wire mesh fence) along current footpath RoW. Construct 3m wide cycleway using natural dark blue bitumen colour.

Point 1d

Comment: The metal "kissing gate" (Figure 7a)), is an unacceptable blockage to cyclists and wheelchair users.

Action(s)
Remove metal "kissing gate". Replace with single, sturdy fixed or lockable bollard, for example as shown in Figure 7b), located in the middle of the pathway.

a) "Kissing Gate"
(View from North)

b) Lockable, Fold-down Steel Bollard
(https://www.barriersdirect.co.uk/)

Figure 7: Northern Boundary of Severn Trent Land

1.4.2. Section 2, From Severn Trent Sewage Works, to Blackbrook Lane

A map showing this section appears in Figure 8. Descriptions below relate to points identified on the map by circled numbers.

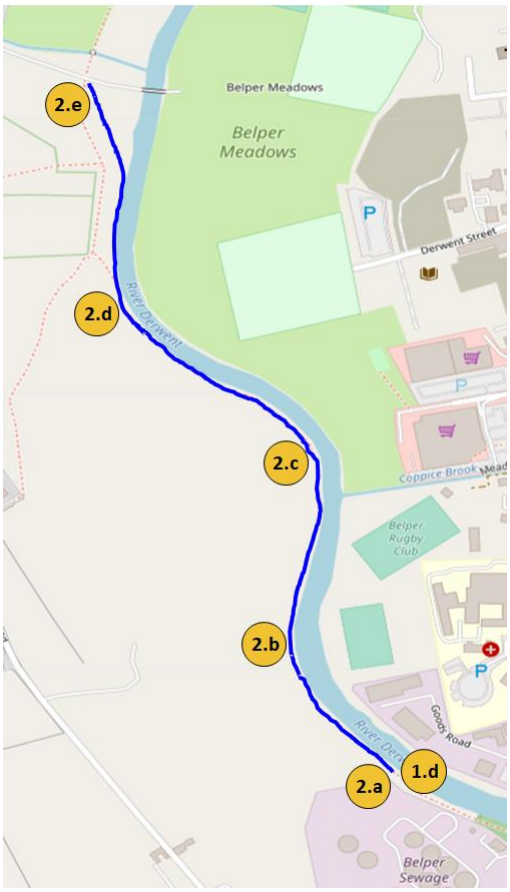


Figure 8. Section 2: Detail Map

Points 2a to 2e

Comment: Most walkers already use the iinformal path beside the field, i.e. the proposed revised RoW route, Figure 2b), rather than the official RoW across the field. The cycleway will follow this.

Action(s)
Continue 3m wide cycleway, broadening the path into the field (not into the neighbouring grassland), and following the revised RoW route. By agreement with the farmer, leave unfenced.

Point 2b

Comment: The path passes through an ungated gap (currently 1.45 m wide) in a low (75 cm) and overgrown wall. This is seen in Figure 9a), though very overgrown – the stones in the ground mark the line of the wall.

Action(s)
Widen existing gap in wall by removing stones on west side, to accommodate 3m wide cycle way. Use surplus stones to create decorative stone feature.

Point 2c

Comment: The path curves right and passes through an ungated gap in an overgrown fence, Figure 9b). Immediately to the left is a gateway into a fully enclosed field.

Action(s)
Widen existing opening in fence to accommodate 3m wide cycleway. Ensure pathway curves are not excessive.

Points 2d to 2e

Comment: The path moves away from the river, leaving an attractive triangular area of grassland between river and pathway; there is a popular riverside "beach" below this. At point 2e (seen in Figure 9c)) the cycleway passes close to a dense clump of young trees (seen to the left of the figure) and joins Blackbrook Lane. This serves the surrounding houses and leads to the closed Strutt estate bridge. The cycleway follows the lane west for around 10m.

Action(s)
Adjust line of fence (agreed with farmer) west of tree clump and towards telegraph pole, to give adequate cycleway width without harming the trees.

a) Gap in Overgrown Low Wall, Point 2b
(View from North)

b) Gap in Overgrown Fence, Point 2.c
(View from South)

c) Cycleway Joins Blackbrook Lane at Point 2.e
(View from North)

Figure 9. Features of Section 2

1.4.3. Section 3, From Blackbrook Lane to Bridge Foot

Maps showing this section appear in Figure 10. Descriptions below relate to points identified on the map by circled numbers.

Figure 10. Section 3: Detail Maps

Points 3.a to 3.b

Comment: The cycleway leaves Blackbrook lane at Point 3.a, on a rough farm track. It descends to pass, at Point 3.b, through a historic stone gateway, Figure 11a), with a pinch stile directly alongside. The farmer has indicated that the gate itself is redundant. The track then immediately crosses Black Brook on a stone bridge. The gap between the stone gateposts is 2.7 m, with the bridge itself a minimum width of 2.6 m.

Action(s)

Remove redundant gate. Leave historic stone gateposts and pinch stile in place without change.

Continue 3m wide tarred cycleway, accepting slight width reductions between gateposts and on bridge, light brown surface colouring.

Points 3.b to 3.c

Comment: The cycleway rises from the brook crossing, with wire fence to the west side and stone wall to the east, well-concealed by ivy and undergrowth. The distance between the two is well over 3m. At the northern corner of the field to the west, the cycleway passes through a narrow gap in the fencing at Point 3.c, Figure 11.b), with a low historic stone post on the east side, also seen in the figure.

Action(s)
Remove undergrowth on both sides of the path to enable continuation of 3m wide cycleway, ensuring wire fencing remains in place on west side.

Leaving the corner fence post (left-most in Figure 11.b)) and the low historic stone post to the right, remove the three other wooden fence posts seen in the picture, as well as the metal post. The gap between corner post and stone post is 2.75m. This forms a modest and acceptable constriction to the cycleway, which passes through.

Terminate the tar strip tidily at border of gravel ST access lane, at same level.

a) Gateway Just North of Point 3.a
(View from South)

b) Narrow Access at Point 3.c
(View from South)

c) Near Point 3.d, Gate on ST Service Road
(View from North)

d) Exit onto Bridge Foot
(View from North)

Figure 11: Features of Section 3

Points 3.c to 3.d
Comment: The route now joins a ST access lane for 240 m approximately. This leads via a padlocked gate, Figure 11c), to a concreted parking zone, serving a self-contained ST pumping station, Point 3.d. The lane is 3m wide, with a compacted earth/gravel surface, maintained to a high standard by ST.

The gate is owned and controlled by ST. It has pedestrian access on both sides, and distance between gateposts is 3.55m approximately. To its east, a stone wall lies parallel to the road, with clearance

from the gate post of 1.05 m. To its West, the land is banked up with wooden fencing separating bank from road.

Action(s)
(No change to ST access lane, which is deemed acceptable for direct inclusion in the cycleway.)

Leave metal gate (Figure 11.c) unchanged. Adjust the pathways to either side according to Figure 12, to same surface as on roadway. Remove pedestrian side-gates currently in place. On the West side, this will require cutting into the rising bank, and removing or adjusting the wooden fencing nearby.

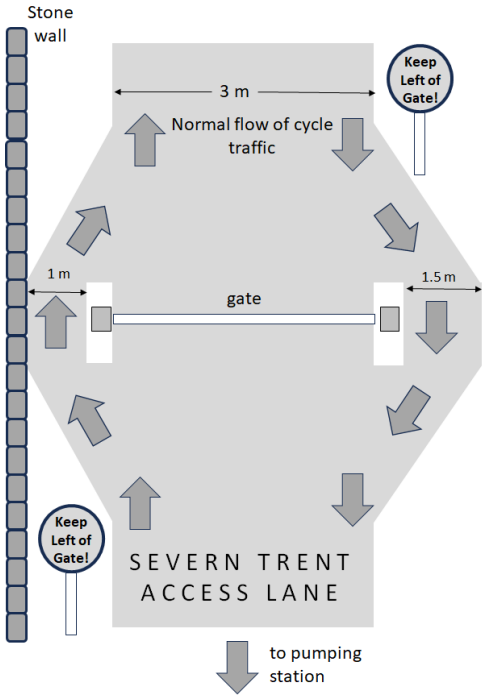


Figure 12: Proposed Adjustment to ST Gate, with Pedestrian/Cycle Passage on Either Side

Points 3.e to 3.f
Comment: From the northern edge of the ST concrete parking area, the footpath continues north, moving to the riverside. It is compacted earth and gravel, in moderately good condition, with a little undergrowth at its edges.

Action(s)
Resurface path to 3m width (or as close as possible), blue colour, clearing undergrowth as necessary.

Points 3.f to 3.g
Comment: This section runs along a high stone embankment wall above the river, with an overgrown fence and hedge to the west. It has been repaired and partly retarred following recent flood damage. The path width is somewhat variable, but always greater than 2.5 m.

Action(s)
Fill occasional potholes in present surface. Ensure wire & post fence is retained on field side.

Point 3.g

Comment: The pathway rises to join with Bridge Foot (part of the A517), the road crossing the Derwent.

Action(s)
Install lockable bollard, of the style shown in Figure 7b).

1.5 Signage

The signage proposed in Appendix 2, or similar, will be implemented.

1.6 Fencing

Since the cycleway will be located on a floodplain, any fencing installed must comply with Section 7 of Reference 3. This indicates that it must be of the Post and Wire type with either wire strands or at least 100 mm spaced mesh. Note that barbed wire may not be used.

1.7 Landscaping and Visual Impact

As it follows paths already in place, the visual impact of the cycleway will be limited. Though the path will be wider, its permanent structure will limit erosion and avoid resultant informal route diversions. Some scrub and young self-seeded trees will be lost adjacent to the sewage works. The proposed mitigating actions are detailed in the Biodiversity Net Gain analysis.

2 Access

2.1 Inclusivity

The route will be free of motorised traffic for its entire length, apart from the very occasional vehicles which may be expected along the short stretches of lane at Points 1.a, 3.a, and 3.c to 3.d. It will thus be a safe place for people of all ages and abilities to enjoy this riverside route. Walkers, joggers, cyclists and users of disability vehicles will all benefit, including those in family groups. Access controls will be designed not to unreasonably impede any user group. Confident and longer-distance cyclists will use the route as part of a longer outing.

2.2 Public Transport Links

Via Bridge Foot (Northern End)

Belper rail station (seen in the map of Figure 1) is just under 1 km away from the northern end of this cycleway section. Confident cyclists will be able to cycle from there. Novice cyclists may prefer to push their bikes along the A6 as it passes through Belper.

Trent Barton “Sixes” buses, and the Transpeak bus service pass through Belper on the A6. There are car parks either side of Belper North Mill, lying on the north side of Bridge Foot.

Via Chevin Road (Southern End)

The nearest settlement to this access point is Milford, which lies around 1.5 km south of the start of this cycleway section, as it leaves Chevin road. Trent Barton “Sixes” buses, and the Transpeak bus both pass through Milford.

Car parking is very limited both in Milford, and along Chevin Road. The nearest rail station is Duffield, several kilometres to the south. For those cycling from Milford, Chevin Road is quiet, but narrow, with one steep hill.

2.3 Construction Access

Construction access to the cycleway presents a challenge, as much of it is remote from the road network. However it begins and ends on roads, and is accessed by several farm or access lanes. It is also noted that construction vehicles of limited size will be able to drive along those parts of the cycleway already constructed, thus providing access to their furthermost end. It is proposed that construction starts from the north.

Northern Part

This is illustrated in Figure 13. Although Blackbrook lane is a possible access route, it is not favoured, as it is narrow and passes several houses. Instead, construction vehicles will be brought through the ST access gate off the A517 just northeast of Crossroads Farm, thus reaching the northern section of the cycleway. This route is strong enough to support heavy vehicles, including 8-wheel and articulated. For construction in the summer months, the farmer has given permission for construction vehicles to be temporarily parked in the field alongside the cycleway, indicated in Figure 13. The alternative bridge over the brook, shown in the Figure, will be used when access is needed from the A517 to the south of the brook. This is used routinely for farm traffic.

Smaller dumpers will be required to surface the cycleway bridge over Blackbrook. Movement of heavy machinery across this bridge is not permissible, as it is not adequately load-bearing, however it can be reached from either side.

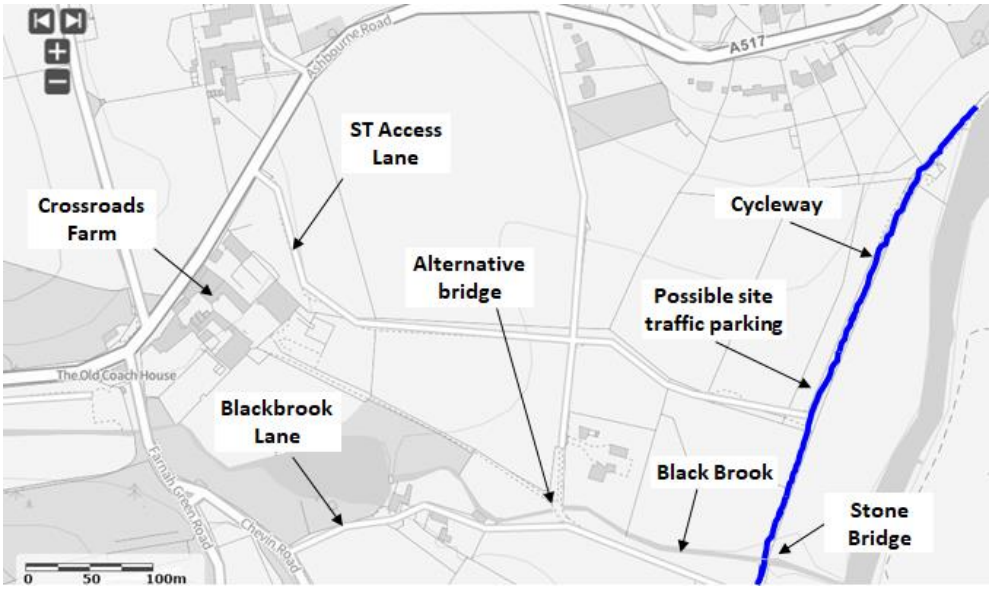


Figure 13: Access Lanes at Northern End

Central Part

As the route is developed from the north, the contractor will drive along it to access each new stage. It is also possible to drive for some distance along Footpath 64 as it leaves Blackbrook lane southwards, as the farmer uses this as a tractor route.

Southern Part

The southern end of the cycleway can potentially be approached by contractors' vehicles via the ST access lane. ST are clear however that this should not be obstructed. Strictly by agreement with ST vehicles for arborists and landscapers (e.g. for removal of undergrowth) could possibly come by this route.

References

1. Sustrans traffic-free routes and greenways design guide. November 2019. Sustrans. https://www.sustrans.org.uk/for-professionals/infrastructure/sustrans-traffic-free-routes-and-greenways-design-guide/ Accessed October 2022
2. Cycle Infrastructure Design. Department for Transport. Local Transport Note 1/20. July 2020. https://www.gov.uk/government/publications/cycle-infrastructure-design-ltn-120
3. Statutory Guidance, Excluded Flood Risk Activities. October 2016. https://www.gov.uk/government/publications/excluded-flood-risk-activities-environmental-permits/excluded-flood-risk-activities#post-and-rail-or-post-and-wire-fencing-in-a-floodplain

Appendix 1: Proposed Footpath Changes

Note: These changes are reflected in the maps of Figure 2, but may be subject to further minor adjustment. Full details may be found in the formal application made to the county council.

East/ North = Eastings- Northings

Row	Belper FP No.	From		To		Proposed Changes
		Description	East/ North	Description	East/ North	
1	64	Junction of riverside path (FP64) with Bridge Foot	434471-348172	Junction of footpath with Blackbrook lane	434108-347668	Convert from Footpath to Bridleway
2	64	Junction of FP64 with Blackbrook lane (which is also FP67)	434108-347668	FP64 adopts riverside position	434344-346911	Relocate (retaining one small segment, see Row 4 below). Angle path towards river, and then follow riverside route, as shown on map. Designate as Bridleway.
3	64	FP68 meets current FP64	434108-347426	FP64 adopts riverside position	434344-346911	Extinguish current path, except segment in Row 4 below.
4	64	FP68 meets current FP64	434108-347426	FP79 meets FP64	434105-347610	Retain this segment of FP64. Redesignate as FP68(?). Used by farmer for tractor access to southern fields
5	64	FP64 adopts riverside position	434344-346911	FP64 meets Chevin Road	434505-346250	Convert from Footpath to Bridleway
6	68	FP68 meets FP64	434108-347426	Extended FP68 meets relocated FP64	434135-347430	Extend FP68 to meet relocated FP64; already in place as informal footpath

Appendix 2: Indicative Signage

The route will be identified by distinctive roundels placed periodically on posts, and especially at junctions. The signage proposed here is indicative only, and will be finalised by agreement with Amber Valley Borough Council. Note that there are two Severn Trent gates, referred to below as “ST south gate” and “ST north gate” respectively. In both cases the cycleway skirts around them.

Location	Indicative Wording	Approx. size (cm)
For all traffic		
50 m south of Blackbrook Lane, on river side of cycleway.	Interpretation Board. Shows whole route, “You are Here”, local information e.g. Carriage Bridge et al.	100 x 70
For northbound traffic		
At junction of Chevin road and ST sewage works access lane.	**Derwent Valley Cycleway, Belper West Bank link.** Bridge Foot 1½ miles. Beware of farm or works vehicles on sections of the trail. Cyclists please respect walkers.	30x30
At point cycleway leaves ST sewage works access road.	Derwent Valley Cycleway ->	20x30
Just south of ST sewage works access bridge over river	To South Belper. Cyclists cross bridge proceed on foot ->	20x30
10 m south of junction with Blackbrook lane.	Beware of motor vehicles ahead	20x30
10 m south of junction with ST gravel access road to pumping unit.	Beware of motor vehicles ahead	20x30
10 m south of ST north gate.	Go slowly, pass to the left of the gate	20x30
10 m south of junction with Bridge Foot.	**Cyclists Stop at Road ahead** Go right for Belper centre (½ mile) and mills. The cycleway continues northwards on Wyver Lane, ¼ mile to the left. Proceed by road, or walk.	30x30
For southbound traffic		
At junction of cycleway and Bridge Foot.	**Derwent Valley Cycleway, Belper West Bank link.** Chevin Road 1½ miles. Beware of farm or works vehicles on small sections of this trail. Cyclists please respect walkers.	30x30
10 m north of green pump station	Go slowly, Beware of motor vehicles ahead.	20x30
10 m north of ST north gate.	Go slowly, pass to the left of gate ahead.	20x30
10 m north of junction with Blackbrook lane	Beware of motor vehicles ahead	20x30
Just north of ST sewage works access bridge over river	To South Belper. Cyclists cross bridge on foot ->	20x30
10 m north of junction with sewage works access lane	Beware of motorised vehicles ahead.	20x30
Just west ST south gate	**Cyclists Stop at Road ahead** Cycleway ends here For Milford centre and mill (1 mile) turn left on road. Proceed with caution - narrow road with a steep hill.	30x30

Pictorial Representation of Signing

Signs shown on this side of the cycle-way are placed for north-going traffic.

Signs shown on this side of the cycle-way are placed for south-going traffic.