

Design summary

Thornbury to North Bristol Sustainable Transport Corridor improvements

To provide improved facilities for buses and people walking, cycling and wheeling, we are proposing the following:

A38 improvements – phase 1

- **A 2-way cycle track alongside the footway on the A38 between Almondsbury and Alveston.**
- **A new bus lane southbound approaching Hortham Lane**, where buses regularly get stuck in traffic at busy times.
- **Improvements to the bus stops along the A38.**
- **Improved crossing facilities for pedestrians and cyclists along the A38**, to allow safe access to the new cycle track and to improve access to bus stops.
- **Reduction in speed limits at Almondsbury and Rudgeway** to improve safety and support increased walking, cycling and wheeling.

Bradley Stoke Way improvements – phase 1

- **A 2-way cycle track with separate footway mostly on the western side of Bradley Stoke Way** to be constructed by widening the existing shared use path.
 - **A new southbound bus lane approaching Savages Wood Roundabout** (opposite Tesco).
- Improved crossings** to enable safer access to/from the cycle track from both sides of Bradley Stoke Way and when crossing side roads at junctions.

Further details are provided in the following sections:

A38 between Almondsbury and Alveston

A combination of bus infrastructure, junction improvements, 2-way cycle track and improved footway is proposed between Almondsbury (Over Lane junction) and Alveston (David's Lane junction).

Bus infrastructure improvements

A southbound bus lane is proposed from Woodhouse Avenue to Hortham Lane. A signal-controlled bus gate will be included at the Hortham Lane junction to provide priority to buses. A bus lane is required at this location as buses frequently experience delays due to queuing traffic in peak periods and when traffic is diverting on to the A38 from the M5 southbound

between Junction 14 and 16. These measures will help to improve reliability of bus journeys along the corridor.

This new bus lane will generally be created through widening into the verge, with the exception of the last 60m approaching the Hortham Lane junction. It will be necessary here to convert the current southbound left-turn lane into the bus lane. Left turns would still be permitted but with a single southbound lane for all non-bus traffic. Traffic counts indicate that there is a relatively small number of vehicles using this lane and that converting it to a bus lane will not have a material impact on journey times through the junction.

Improved bus stop facilities are proposed along the A38 to meet a consistent standard for accessibility (including raised kerbs), shelter and information provision. It may be necessary to relocate some bus stops a short distance to enable these improvements to be made or to improve accessibility for users. In particular, the following are proposed:

- At Masons Arms, the southbound bus stop would be relocated from south of Briarleaze north to new position closer to the northbound stop near the Car Wash and Masons Arms pub.
- At Hortham Lane, the southbound bus stop would be relocated from south of the M4 overbridge to new position closer to the northbound bus stop (to the north of Hortham Lane).

Some bus stops are currently maintained by Parish Councils. Where this is the case, we will undertake further engagement with them regarding the proposed improvements and arrangements for future maintenance.

Junction improvements

Major junction improvement at junctions such as Church Road, Greenhill Road and David's Lane will help to improve reliability of bus journeys and reduce delays experienced by other vehicles. We are currently undertaking further design work in regard to these major junction improvements. We will consult on proposals at these junctions during Phase 2.

Walking, cycling and wheeling improvements

We are proposing to place the A38 cycle track on the western side of the road between Alveston and Almondsbury as this enables direct access to be provided to Alveston. To provide a high-quality facility, crossings at side roads will be provided to give priority to cyclists and pedestrians, therefore increasing safety and reducing delay.

In most cases, a 2-way cycle track constructed to one side of the road takes up less space than if separate cycle tracks were to be provided on each side of the road whilst also providing a more attractive facility for cyclists. The minimum desirable width set out in the [Cycle Infrastructure Design guidance](#) (LTN 1/20) is 3 metres for a 2-way track and 2 metres for a one-way track. Providing one-way tracks on both sides of the road would therefore require a total of 4 metres to be allocated for cycle tracks.

Providing a 2-way track on one side of the road is also expected to be more cost-effective and result in less disruption during the construction works than if works were required to both sides of the road.

Where the new cycle tracks pass through bus stops, we will provide segregation between cyclists and bus users. Where there is space, bus stop bypasses for cyclists will be provided.

The new cycle track along the A38 will be created mostly through reallocating roadspace that is not currently used. This includes areas that are currently hatched (area of stripes painted to keep drivers apart) or where traffic lanes are wider than needed. Existing right-turn filter lanes located in the central reservation will be retained as they are important to maintain traffic flow and safety.

The width of traffic lanes on the A38 will generally be reduced to industry standards to allow large vehicles including buses and lorries to pass safely. Existing on-road cycle lanes will be removed.

A reduction in the speed limit from 40mph to 30mph is proposed between Almondsbury (Oaklands Drive) and Woodhouse Down (BP garage).

This will be needed to meet the Cycle Infrastructure Design guidance which identifies the minimum horizontal separation to be provided between cycle tracks and the carriageway and generally to improve safety and support increased walking, cycling and wheeling through these residential areas.

Bradley Stoke Way

A combination of bus infrastructure, junction improvements, 2-way cycle track and improved footway is proposed along Bradley Stoke Way between Aztec West and Great Stoke Roundabout.

Bus infrastructure and junction improvements

Improved bus stop facilities are proposed for the non-metrobus stops along Bradley Stoke Way that are served by the T1 and 73 bus routes. This will include accessibility improvements (including raised kerbs), shelter and information provision.

Major junction improvements at the Patchway Brook and Savages Wood Roundabouts will be consulted on in Phase 2.

Walking, cycling and wheeling improvements

The existing shared use path network running along Bradley Stoke Way provides a safe route for walkers, cyclists and wheelers that is segregated from traffic but does not provide separate facilities for walkers, cyclists and wheelers in accordance with the Cycle Infrastructure Design guidance. We propose upgrading this to create a 2-way cycle track with separate footway which will run from the Aztec West Roundabout to Great Stoke Roundabout.

Improved walking, cycling and wheeling crossings will provide a continuous high-quality route along its length and access from the eastern side of Bradley Stoke Way. Key crossing upgrades will be required at:

- Aztec West – A38 crossing to south of the roundabout.
- Woodlands Lane signalised junction.
- Webbs Wood Roundabout.
- Great Meadow Roundabout (known as Baileys Court)
- The Worthys.

Where the new cycle tracks pass through bus stops, we will aim to provide segregation between cyclists and bus users. Where there is space, bus stop bypasses for cyclists will be provided.

Walking, cycling and wheeling improvements along the Stoke Brook bridge and at the Patchway Brook and Savages Wood Roundabouts will be consulted on as part of Phase 2 of the scheme.