

# Llanfoist to Abergavenny Shared Footbridge – Public Information Leaflet



monmouthshire  
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**PARSONS  
BRINCKERHOFF**

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## Introduction

### Outline of the Scheme

Consultants WSP | Parsons Brinckerhoff have been appointed on behalf of Monmouthshire County Council to develop a new and safer cycling and walking route from the Post Office in Llanfoist to the Town Hall in Abergavenny. The existing footway link reaches a pinch point over Abergavenny (Llanfoist) Bridge, both preventing and discouraging usage.

Under the Active Travel Bill the council have a duty to look at key walking and cycling routes and investigate additional routes.

The Scheme comprises the construction of a shared cycle path bridge and pedestrian access between Llanfoist and Abergavenny over the River Usk which will then converge with the existing path on Small road improvements will also be made to Merthyr Road.

### Objectives of the Scheme

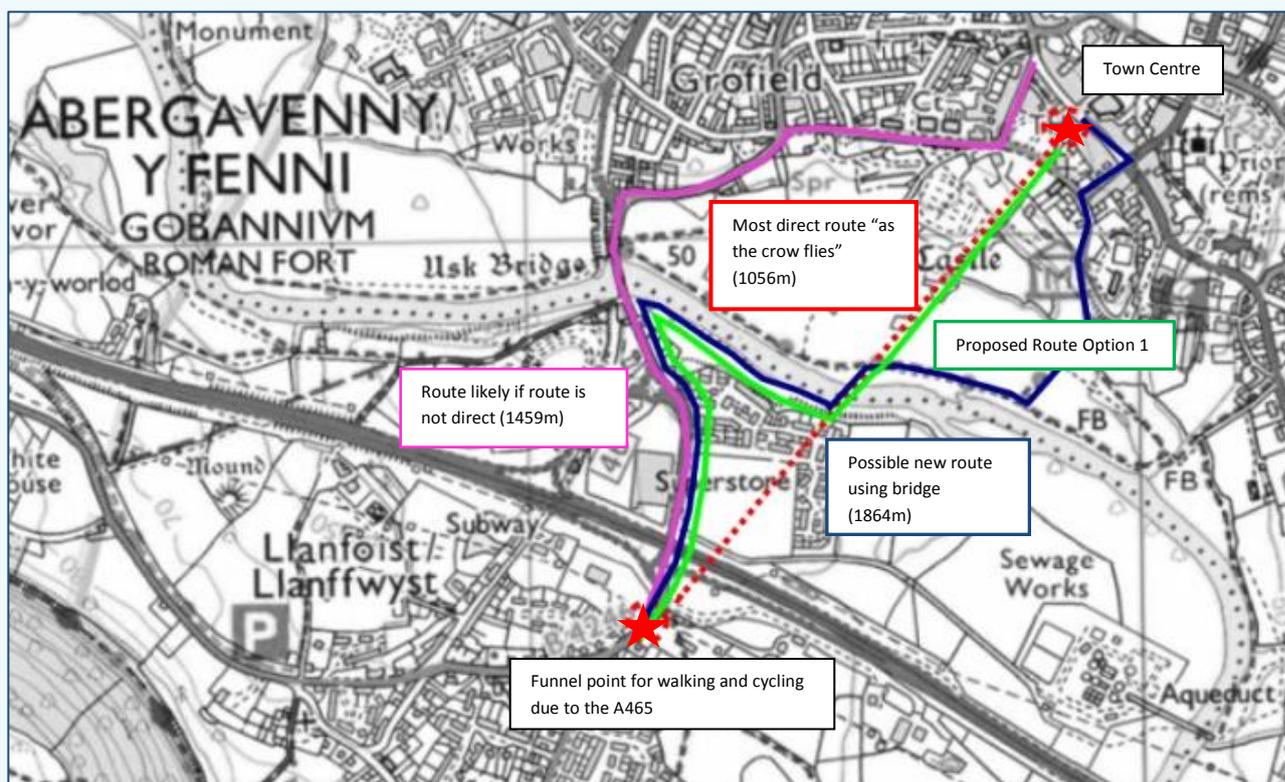
The objectives of the scheme aim to:

- Improve the facilities for pedestrians and cyclists travelling between Llanfoist and Abergavenny;
- Provide a safe crossing over the River Usk; and
- Connect Llanfoist village and Abergavenny town.

### Sustrans Involvement

Sustrans commented that this Scheme has been long overdue and the existing route from Llanfoist to Abergavenny is potentially too far away from the “natural” route for pedestrians which avoids what is perceived as an unsafe bridge in the form of Abergavenny/ Llanfoist Bridge.

However, Sustrans were concerned about the direct route from Llanfoist to Abergavenny and therefore recommend the proposed route to be as close to “how the crow flies” route as possible. By potentially crossing through the new housing estate and promoting the use of the proposed bridge, whilst promoting a safe and coherent link to other routes and providing great views of the area.



Sustrans map showing direct routes from Llanfoist to Abergavenny town

## Proposed Options for the Location of the Bridge

The current proposals include three options for the position of a shared bridge over the River Usk. Each footbridge will require the construction of footpaths on the southern side of the River Usk to allow access.

### Option 1 – indicated in Green

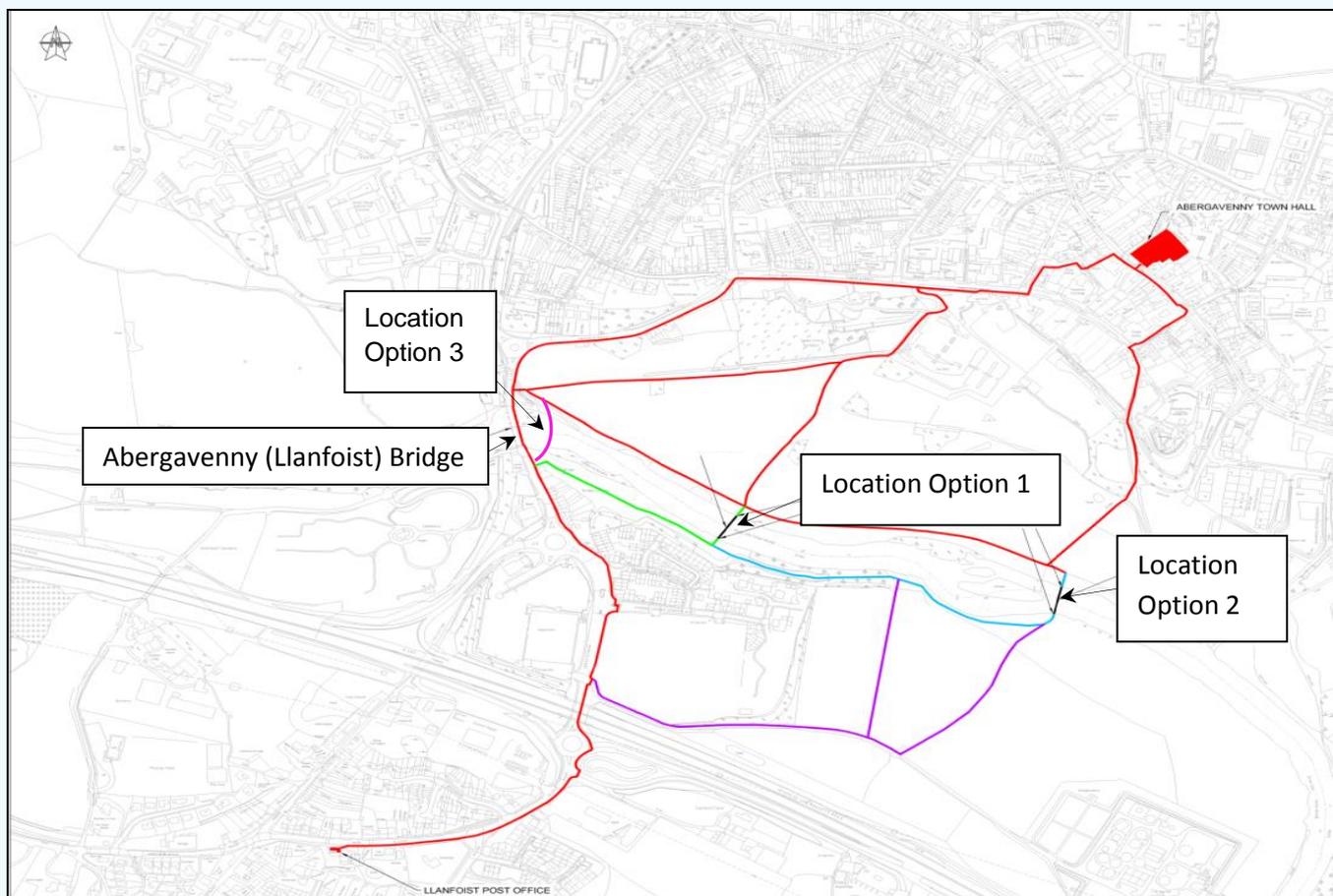
Bridge location Option 1 is located approximately 300m east of Llanfoist Bridge and will require the construction of a footpath on the southern side of the River Usk which will be positioned on the banks of the River Usk and will travel west to link with the A4143 at Llanfoist Bridge. The Bridge will be located to the south of Castle Park Meadows.

### Option 2 – indicated in Blue

Bridge location Option 2 is located approximately 800m east of Llanfoist Bridge and will require the construction of a number of footpath options (shown in purple on the figure below) on the southern side of the River Usk in order to link the paths to the existing pedestrian accesses. The Bridge will be located to the south of Castle Park Meadows.

### Option 3 – indicated in Pink

Bridge location Option 3 is located directly adjacent to Llanfoist Bridge, and pedestrian footpaths will link to the existing pedestrian accesses.



Map of Abergavenny and Llanfoist showing the existing pedestrian routes (red); the proposed pedestrian routes (purple, green and blue) and the proposed locations for the Scheme (Option 1, 2 and 3).

# Environmental Constraints

Desk and site studies have been undertaken for a search area within a radius of up to 1km for all protected and notable species including all statutory and non – statutory designated sites. The impacts to relevant species have been considered.

## The River Usk

The River Usk has a European designation Site of Special Scientific Interest (SSSI), and a Special Area of Conservation (SAC).

The River is designated for its function which comprises important foraging features, and habitats for numerous European protected species in the area such as: Otters, Bats, Breeding Birds and White Clawed Crayfish, Atlantic Salmon, and Fresh Water Pearl Mussels.

The land surrounding the River Usk comprising Linda Vista Gardens is also made up of species-rich meadows which are also prone to flooding. The limits of the Brecon Beacons National Park fall just within the 1km study area.

## Impacts to Ecology and Biodiversity

Whilst none of the three options are likely to cause significant ecological harm it has been considered that:

- **Option 3** is likely to have **fewer ecological impacts** associated with the proposed works **than Option 1 and Option 2**;
- **Option 1** is likely to have fewer ecological impacts than **Option 2**; and
- **Option 1 is the preferred option.**



Map showing Statutory and Non Statutory Designated sites within 1km of the proposed Scheme

## Heritage Assets

The Heritage Assessment undertaken considered the general condition and use of Abergavenny (Llanfoist) Bridge, which is a designated Scheduled Monument and is therefore of national importance.

The assessment also considered a number of other heritage assets in the area and their setting. These comprise:

- Abergavenny Castle (Scheduled Monument)
- Abergavenny (Llanfoist) Bridge (Scheduled Monument)
- Linda Vista Park and Gardens (Grade II listed)
- Site of the Roman Fort (Scheduled Monument)
- Llanfoist New Cemetery (Grade II listed park and garden)

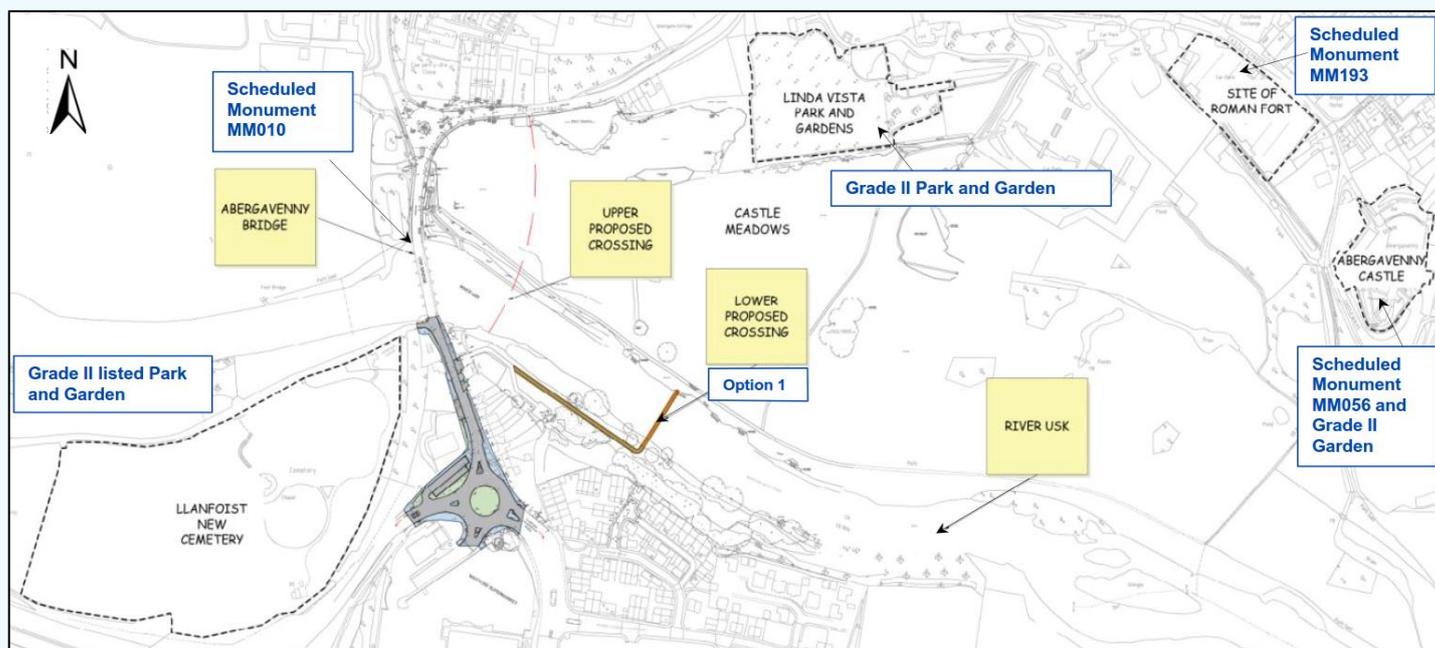
### Impact on Cultural Heritage

The introduction of a footbridge to the area (particularly Options 1 & 2) is considered to have a minor impact on the settings of Llanfoist Bridge, Linda Vista Gardens, Castle Meadows, Roman fort and castle.

### Conclusion

The bridge will not cause harm to the significance of the settings for any of the nationally important heritage assets and it will not detract from their appearance, historical associations or heritage value.

The use of sympathetic materials (such as low-key signage) will be employed to minimise impacts to setting.



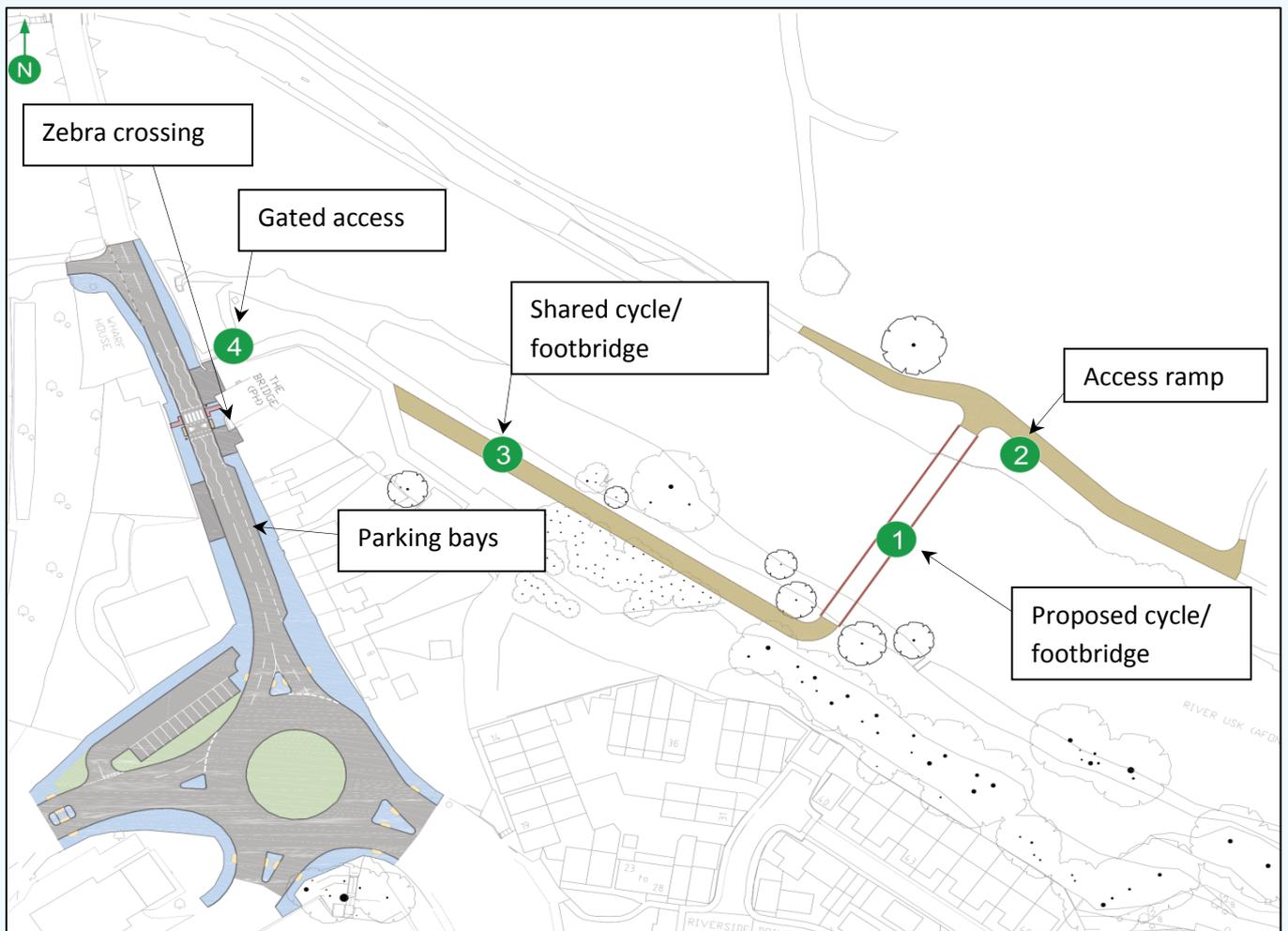
Map of Llanfoist and Abergavenny showing Cultural Heritage Assets

## Scheme Layout – The Preferred Option

### Location Option

The preferred location for the Scheme is **Option 1** selected for the following points:

- There are no constraints along the existing infrastructure and the Option makes use of existing paths
- Most direct route to Abergavenny
- Reduced impact on ecology  
Reduced impact on the visual setting of Abergavenny Heritage sites



Map of Llanfoist and River Usk showing Scheme layout for Option 1 and Improvements to Merthyr Road

## Bridge Design

To fulfil the objective of improving connectivity between Llanfoist and Abergavenny, the proposed cycleway will span the River Usk in a sensitive location of high visibility and great natural beauty. The proposed structure will be a new landmark for future generations, creating new viewpoints of the adjacent historical monuments surrounding it.

### Initial Optioneering

The structural arrangement of the bridge was initially influenced by the following constraints:

- Flooding
- Visual Impact
- Access for disabled people
- Cost

Traditionally, new bridges are built above the 1 in 100 year (plus climate change) flood level.

This level, at this particular location, is known to be high (approximately 6 metres above ground level) and flooding of the surrounding plains is a common occurrence.

There are two possible scenarios; firstly construction above flood level which will require the construction of access ramps with significant visual and cost impact or alternatively build the structure below flood level and accept that the bridge will not be usable during extreme flood events. At this stage we are focussing on the latter option, removing the need for significant access ramps and replacing it with smaller earthwork alternatives.



Ramps were envisaged to be constructed of steel and are expected to rise 6 to 8m above existing ground level



Visualisation of the bridge (coloured white) positioned at low level, from the north side of the River Usk

Visualisation of the bridge (coloured green) positioned at low level, from the north side of the River Usk



## Structural Form

Structural forms have been determined on the basis that the bridge is constructed at a low level. The two favoured options at this stage are:

### Stress Ribbon



- + Slender appearance leads to visually aesthetic structural form;
- + Minimal visual impact;
- + State of the art technology and advanced structural form;
- + Minimal long-term maintenance;
- + Short installation times;
- + Smaller cranes required;
- Potentially requires more expensive and complex foundations;
- Greater skill and care is required during construction.

### Box Girder



- + Traditional form of construction;
- + Increased flexibility of structural form and aesthetics;
- + Traditional foundations can be employed;
- + Short installation times;
- High fabrication costs;
- Regular maintenance over watercourse required if painted steel is used;
- Creates a confined space inside the box which will have to be maintained/inspected regularly;
- Larger cranes required during construction..

The bridge will have a **55m span** and a **5m clear footway width** (to be confirmed during detailed design). It is envisaged that the ramps will be constructed with earthworks.



Example of a stress ribbon bridge

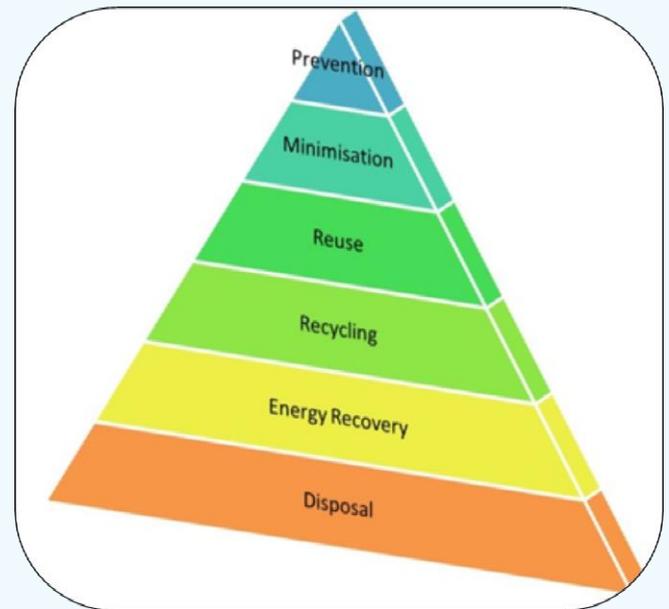
## Sustainability Strategy

The final design of the bridge and the materials included have been specifically selected and carefully chosen to promote sustainability and reduce the carbon impact of the Scheme.

Actions taken to minimise the carbon footprint and promote sustainability include:

- Both structural forms have high strength : weight ratios which minimise material usage and reduce the vertical forces transferred to the foundations;
- Pure Portland cement will not be specified. Instead the cement binder will be a blend of Portland cement and by-products of industrial processing such as fly ash and ground granulated blast-furnace slag (GGBS). The use of 50% GGBS can reduce embodied CO<sub>2</sub> by 40% compared with traditional Portland cement;
- Prefabricated construction, in a quality controlled environment, will be maximised minimising site wastage;
- Enhanced durability without the need for constant cleaning and painting. An exposed concrete deck or a weathering steel construction will require minimal maintenance during the structures service life;
- The structure can be designed without bearings, which will reduce periodic maintenance and replacement works;
- Whole life cycle costs will be minimised where possible, well thought out material selection sourced as locally as possible will be sought;

- The earthwork ramps on either side of the bridge will minimise the usage of steel and concrete.



**Principles of the Waste Hierarchy - Reduce, Reuse, Recycle**

## What Happens Next?

Following the consultation we will consider your responses as we develop the proposals further. If development consent is granted, we anticipate that the scheme approval works could commence in April 2017, subject to funding approval.

### *How you can get involved*

## Consultation Event

Tuesday 13 September 2016:

10am – 7pm

Wednesday 14 September 2016:

10am – 7pm

'The Gallery'

Llanfoist Village Hall

Church Lane, Abergavenny

NP7 9LP

We encourage you to come along to the consultation event to discuss the proposals in more detail with our project team. If you are not able to attend this event, please complete the questionnaire included with this leaflet.

You can also complete the Questionnaire online at:

[www.MonmouthshireCountyCouncil.gov/](http://www.MonmouthshireCountyCouncil.gov/)

Alternatively you can provide your comments to the project team using the contact details below.

When making comments please provide us with your name and address, or, if you would prefer comments to be anonymous, your postcode only. It would also help us if you identify the nature of your interest in the project.



At the public consultation representatives from Monmouthshire County Council and WSP | Parsons Brinkerhoff will be present to answer any questions.



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