	Option A	Option B	Option C	Option A1
Construction				
Cut/ Fill volumes	Low volume of imported earth / fill material for construction. High level of earth needed to be redistributed.	High volume of imported earth / fill material for construction. Equal lowest level of earth needed to be redistributed.	Highest volume of imported earth / fill material for construction. Equal lowest level of earth needed to be redistributed.	No imported earth / fill material required for construction. Highest level of earth to be redistributed on site.
Impact on local road network	Significant highway alterations required to B5026. Good potential to mitigate short term impact.	The most impact due to the major staging works required around the B5026 / Station Road junction.	Diversion of Station Road likely to be required. Greater impact than option A.	Similar impact to option A.
Utility diversions	Extensive diversion of two national gas pipelines and one fuel pipeline. A total of four work sites would be required for these works.	One diversion of a gas pipe line and a possible diversion of a fuel pipeline.	Railway crosses over gas and fuel pipelines but diversion unlikely to be required.	Diversion of two gas pipelines and a fuel pipeline, though less extensive work required than with option A. A total of three work sites would be required for these works.
Greenhouse gas emissions impact	CO2 emissions generated by the construction of this alignment would be 30% less than the level produced with option C.	CO2 emissions generated by the construction of this alignment would be 30% less than the level produced with option C.	This option generated the highest level CO2 emissions as a result of the construction.	CO2 emissions generated by the construction of this alignment would be 30% less than the level produced with option C.

	Option A	Option B	Option C	Option A1
Consultation feedback				
Objectors	Objections mainly from residents in and around Chebsey. Option opposed by Chebsey Village Trust. Consultees objected because the route is longer and would have greater impact on the countryside (requires the most land) and would impact on Chebsey conservation area.	Objections mainly from residents in Norton Bridge and Shallowford. Option opposed by Norton Bridge and Shallowford Action Group as well as Chebsey Village Trust. Consultees stated that this option would impact on the countryside and negatively impact on Norton Bridge.	Objections mainly from residents in Norton Bridge and Shallowford. Option opposed by Norton Bridge and Shallowford Action Group. Consultees expressed concern that the new track is close to Shallowford.	Consultation feedback from option A was applied as A1 is a variant of the original alignment.
Supporters	Some support from residents in Norton Bridge and Shallowford. Consultees felt this option would have least impact (visual and noise) as the track would be in larger cuttings.	Little support from any of the local community. Those that did indicate support felt this alignment was in close proximity to the existing railway.	Some support from residents in and around Chebsey. Overall, consultees felt this alignment was closest to the existing railway and minimised land take.	Consultation feedback from option A was applied as A1 is a variant of the original alignment.

Next steps

More detailed investigations will take place over the coming months to assess the impacts of option A1. Consultation will be undertaken on this preferred option in autumn 2011 before the plans are progressed.

We will be consulting with public, technical and environmental bodies as well as our partners in the rail industry throughout the pre-application stage of the project so that views and opinions can help shape the final scheme. This will include consultation on potential mitigation measures and the emerging construction strategy.

Indicative timeline

An application is expected to be submitted to the Infrastructure Planning Commission (IPC) or its successor body in late 2012 following further consultation.

SPRING 2011	AUTUMN 2011	WINTER 2011	SPRING 2012	SUMMER 2012	AUTUMN 2012	WINTER 2012
announcement of single preferred option	*consultation on single preferred option*	*review consultation feedback*	*consultation on the detailed design and mitigation*	*review consultation feedback*	*information round on final scheme*	*submission of final scheme*

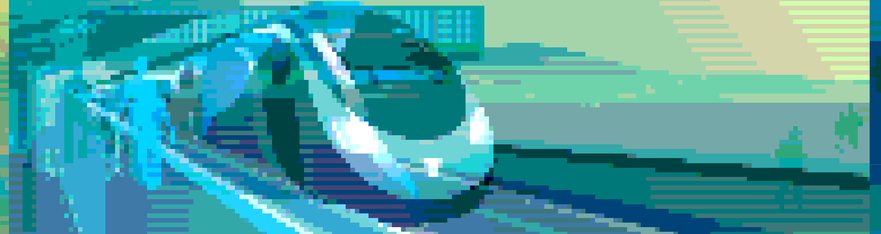
Further information

A summary of the option selection assessment is available online at **networkrail.co.uk/stafford-nortonbridge** and can be viewed at the following locations:

Stafford Library, Shire Hall, Market Street, Stafford, ST16 2LQ

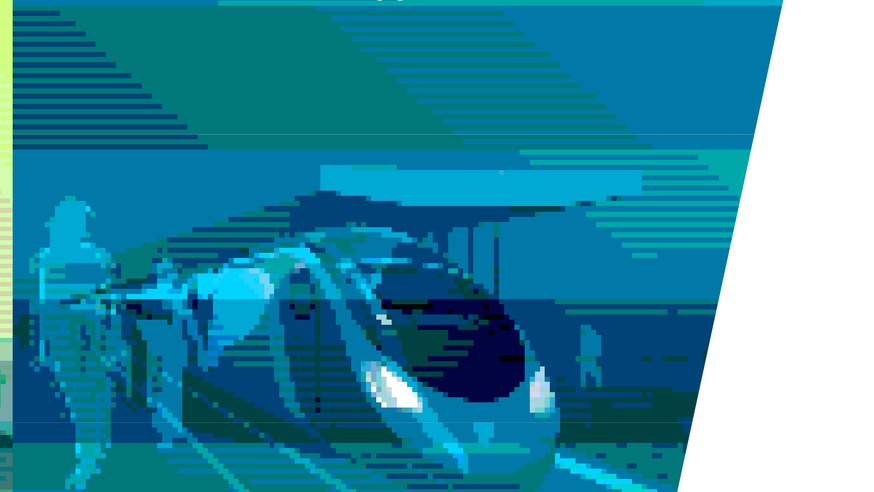
Eccleshall Library, 20 High Street, Eccleshall, Staffordshire, ST21 6B7

Network Rail Helpline: 08457 11 41 41



NetworkRail

Improving the railway around Stafford



Solving a rail bottleneck near Norton Bridge

More people than ever are using the key rail line that connects London, Birmingham, Manchester and Scotland. To keep services on this important route working well in the future we need to remove one of the few remaining bottlenecks at Norton Bridge Junction. That's why in November 2010 we consulted on three options to solve the problem. Our plans will take Birmingham to Manchester trains up and over the main line, delivering a more reliable railway for passengers with extra trains and additional seats.

Extensive analysis of the benefits and impacts of each option is now complete and a preferred alignment has been selected for further development.

The selected option

With all of the facts considered, and no consensus emerging as a result of consultation, a variation of option A - known as option A1 (see map) - has been chosen. This option is similar to A, broadly following a parallel route but slightly to the east.

Option A was initially selected as the best alignment of the three options consulted on last year as it provided the best engineering solution and had least impact on the environment. It also presented the greatest opportunity to mitigate visual and noise impacts.

However, option A also had constraints. As well as receiving some opposition during last year's consultation, it was discovered that the line would require the diversion of two major gas pipes. By varying the alignment there is an opportunity to take account of consultation feedback relating to all three options whilst still maintaining the benefits delivered by option A.

The reasons for selecting option A1 as the preferred alignment include:

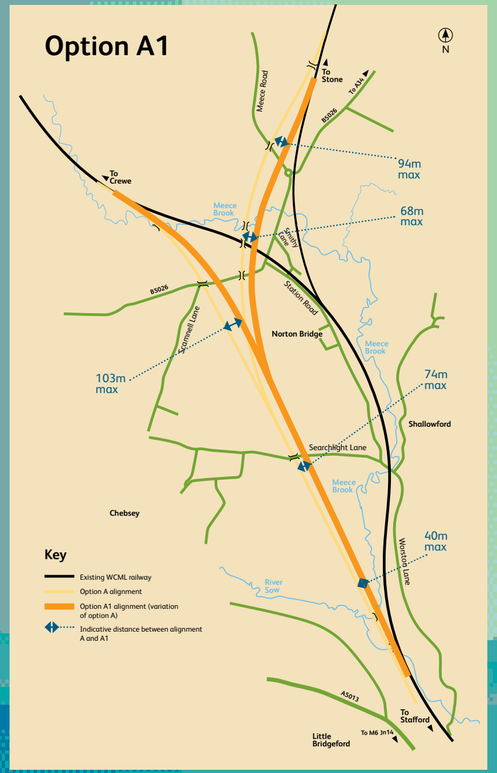
- Seeks to respond to feedback from consultees
- Least impact on the local environment
- Greatest opportunity to mitigate noise and visual impact
- Greatest potential to reduce the amount of construction traffic
- Optimum engineering alignment
- Avoids the diversion of one section of a high pressure pipeline
- Provides overall cost savings

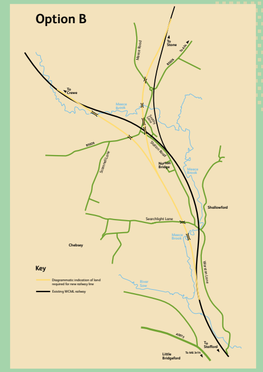
Option selection process

The option selection process was based on the Department for Transport's 'New Approach to Transport Appraisal' (NATA). This featured 33 assessment criteria grouped into themes. These were:

- Consents, environment and sustainability
- Network capacity and capability, engineering and maintainability
- Constructability, access and railway disruption

Each theme was scrutinised in a workshop by a Network Rail expert group, who were tasked with reviewing, assimilating and debating all of the information relating to the options. A preferred option was then selected by each group.





Summary of option selection analysis

	Option A	Option B	Option C	Option A1
Environment				
Noise impact	New noise levels will be introduced. However, there is an opportunity to mitigate this as the track is largely in cuttings.	New track is close to Shallowford and Norton Bridge. It will be difficult to mitigate the impact as the track will largely be on embankment.	Adverse impact on Shallowford due to height of new bridge over the main line. This would be difficult to mitigate.	Similar impact to option A. Track will largely be in cuttings providing an opportunity to mitigate noise impact.
Visual impact	Deeper and longer cutting provides an opportunity to reduce visual impact.	Cutting not as deep, or long as option A so less opportunity to reduce visual impact.	High impact, especially at Shallowford, due to the height of embankments and large bridge over the main line.	Deep and long cuttings (similar to option A) provides an opportunity to reduce visual impact.
Waterways impact	The new railway alignment crosses the Meece Brook on three occasions requiring diversion and the introduction of flood plain compensation measures.	More extensive river diversions and flood plain compensation required compared with option A.	Extensive construction in the flood plain with river diversions and flood plain compensation required. The greatest impact of all the options.	Similar impact to option A.
Local community effects	The settlements closest to this option are located 400m away. These include Norton Bridge and Shallowford. Chebsey is 900m from the new track.	The settlement closest to this option is 100m away. This is the village of Shallowford. Norton Bridge is 150m away and Chebsey is 1200m from the new track	The settlement closest to this option is 50m away. This is Shallowford. Norton Bridge is 200m away and Chebsey is 1400m from the new track. This option is least desirable based on proximity to nearby villages.	The settlements closest to this option are 350m away. These include Norton Bridge and Shallowford. Chebsey is located 950m from the new track.

	Option A	Option B	Option C	Option A1
Engineering and operations				
Railway curvature - track	Good	Good	Acceptable	Optimal – due to longer straights and flatter curves
Signal sighting	Acceptable	Acceptable	Acceptable but least favourable due to signal sighting risks.	Optimal design due to straighter track.
Maintenance	Given local ground conditions, cuttings are preferred over embankments. Option A has more cuttings than the other options.	More extensive embankments compared with option A. As such, there is a higher risk of subsidence and costly remediation.	The large bridge structure over the main line would be a long term maintenance liability. This option has extensive embankments within the flood plain and is, therefore, least preferable.	Similar to option A but the route is slightly shorter.