



EAST RIDING
OF YORKSHIRE COUNCIL



A63 Brough Junction Improvements

Funded by Brough South Consortium

Need for the Project

Why is the project being done?

It is a planning condition that the Brough South Consortium fund improvements to improve the capacity of the junction in order to cope with increased traffic flows from major housing developments in Brough South. East Riding of Yorkshire Council are progressing the scheme on their behalf.

Who is paying for the project and what is the cost?

The overall estimated cost of the scheme is £4.6m, funded entirely by the Brough South Consortium

Why is the existing arrangement so congested?

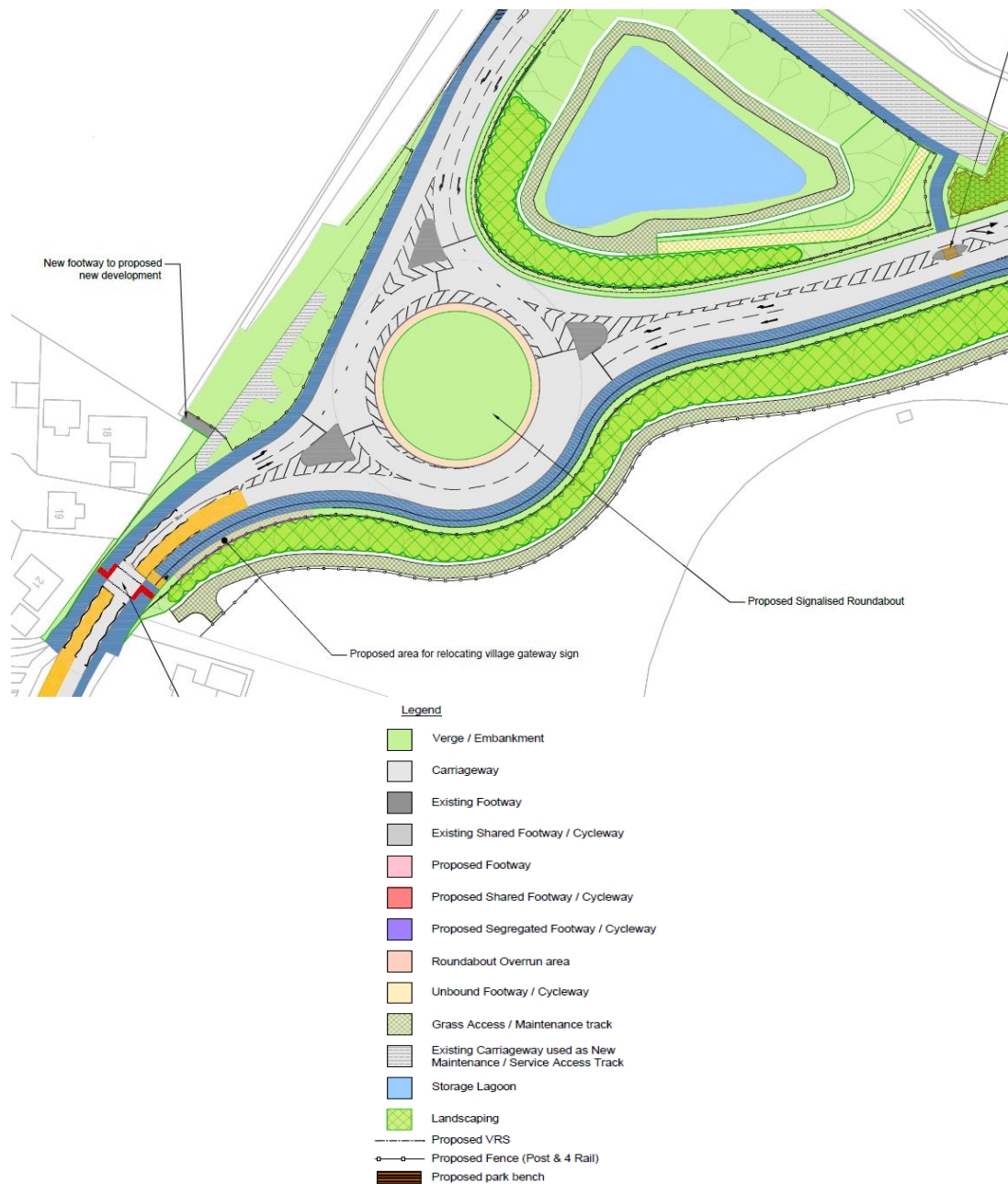
The existing arrangement consists of a 4 arm signal controlled junction with a substantial distance between the stop lines, leading to long “inter-green” periods where all signals are red. Traffic is highly tidal in nature, with congestion largely caused by morning and evening peak hour Brough-Hull-Brough commuter traffic. The peak hour traffic coincides with high pedestrian demand arising from South Hunsley school pupils, removing significant vehicular capacity at the junction when the pedestrian phases are called upon.



Scheme Proposals

What does the scheme aim to do?

Extensive computer modelling predicts an overall junction traffic capacity increase of around 25%, this is expected to reduce queuing and delays particularly during peak hours.



Proposed Signalised Roundabout

How is extra traffic capacity gained?

The proposed design removes traffic signal phases by reducing the main junction to 3 arms and removing pedestrian phases, with pedestrian crossings relocated to separate locations and pedestrians rerouted to a new shared cycle/pedestrian path on the east side of the new roundabout which provides a direct route to South Hunsley School. Traffic signals with queue detection equipment and computer control will ensure the junction operates in a balanced manner to cope with the tidal traffic flow. Welton Low Road and Cowgate Welton approaches which carry relatively low amounts operate as simple priority T junctions. Gaps generated in Welton Road traffic by the traffic signals on the roundabout allow entry to Welton Road from Welton Low Road and Cowgate Welton. For further details see Publicity Drawings Ref EI225-CON-001A attached, and the web link given at the end of this document.

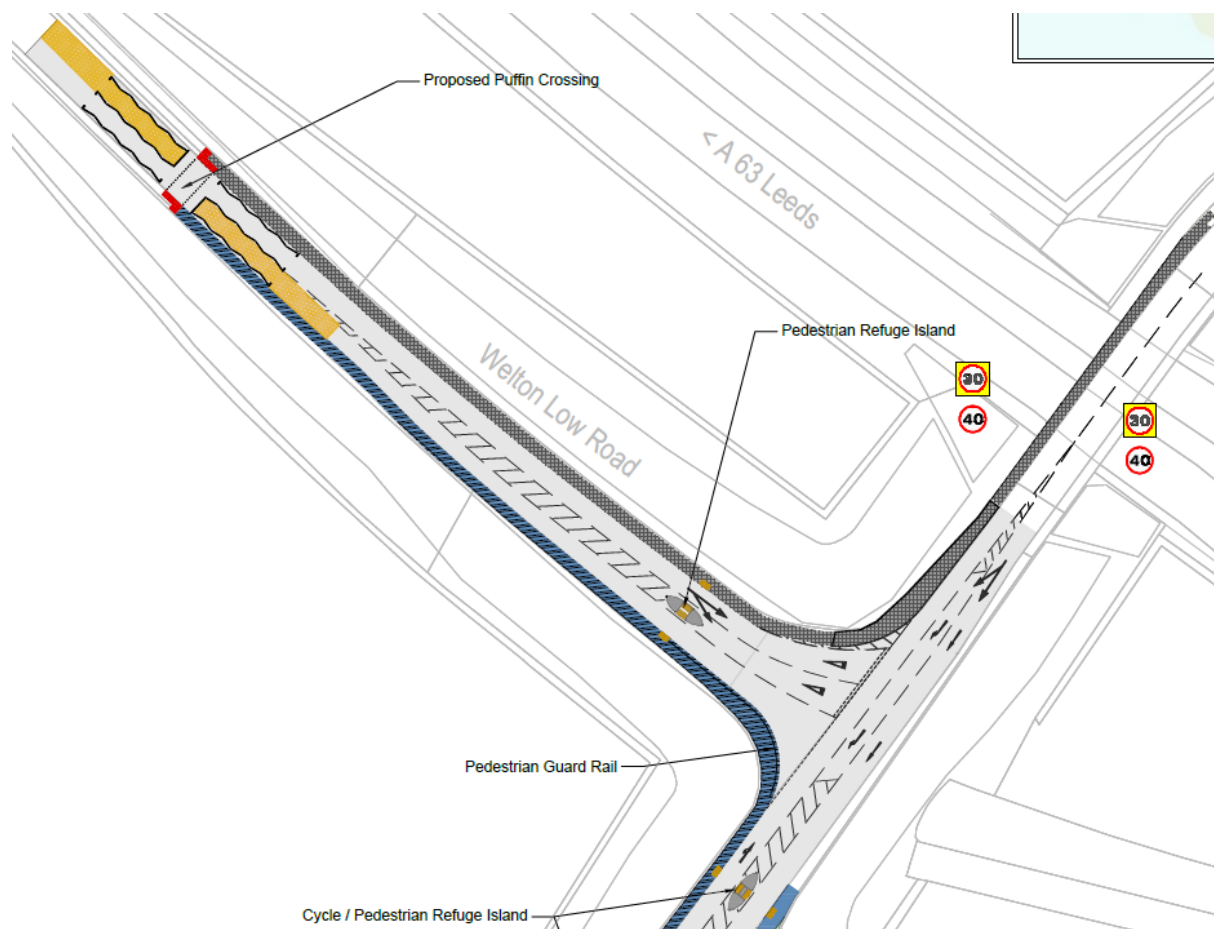
Pedestrian/Cycle Provision

The scheme provides a direct pedestrian/cycle route to the A63 National Highways footbridge for South Hunsley School pupils and other pedestrians wishing to access Welton village.



Pedestrian/Cycle Provision to Access the A63 Footbridge

A Puffin crossing is provided on Welton Low Road to allow safe crossing for pedestrians from Elloughton and any future housing built on the field south of Welton Low Road which is allocated for housing in the local plan. A pedestrian guardrail ensures that any pedestrians that choose to use the Welton Road route to Welton or are unable to use the A63 footbridge are guided to a pedestrian refuge island on Welton Low Road to ensure crossing at a safer point away from the junction with better visibility.



Pedestrian Provision on Welton Low Road

An extra wide Toucan crossing is provided on Welton road to enable safer crossing to the new segregated cycle/footway facility on the eastern side, and a footway/cycleway is provided from Loxley Way on the eastern side where many pedestrians currently walk on the grass verge.



Pedestrian Provision on Welton Road



Were any other options considered?

A study analysed the performance of 7 options. The chosen option is predicted to outperform other investigated options by a significant margin.

What are the limitations of the scheme?

Should traffic continue to grow as predicted pre-pandemic, the junction remains likely to become congested in the future and is predicted to reach its saturation point again around the year 2035. This is because some of the estimated 25% extra capacity generated by the scheme is already taken up as the junction is presently operating over capacity, and because the wider network capacity is restricted by the existing roundabout to the south, the single carriageway A63 overbridge and the single lane slip roads entering/exiting the A63. In the long term, should traffic continue to grow as predicted pre-covid, a much more substantial scheme is likely to be necessary however the junction will always perform better with this scheme implemented than if nothing was to be done.

Whilst the scheme provides a new cycle facility between Welton Road and Stanley Jackson Way, it is not possible to formally extend this over the existing A63 footbridge which is unfortunately unsuitable for cycles (or disabled users), although cyclists may choose to dismount and push cycles over the footbridge to make use of the new more direct route. The Council has enquired whether the A63 footbridge is programmed to be replaced/upgraded with National Highways who own the footbridge; it is likely in the coming years but not expected imminently. Widening the existing footway on the Welton Road slip road loop to upgrade to a combined cycle/pedestrian facility was considered, however the A63 road bridge parapet is of insufficient height and is also unsuitable for upgrading to the higher parapet barriers required.

When is the scheme likely to be constructed?

The main works are expected to commence on site in Spring 2023 subject to an acceptable tender price being received, with some advance statutory undertakers' diversions and minor site clearance work being carried out in the new year.



Will the construction work cause congestion?

The design of the scheme allows much of the work to be carried out off the existing road network however delays and congestion will be unavoidable when working on or immediately adjacent to the existing roads and drivers are advised to avoid the junction if possible during the construction period, particularly at peak hours. Various night time temporary road closures will be required with signed diversions via local roads and the A63 in operation. The Council will ensure that disruption is kept to a minimum using night-time/weekend/off peak hours working wherever it is both possible and economic to do so.

Further Information

Further details can be found here;

<https://www.eastriding.gov.uk/council/plans-and-policies/other-plans-and-policies-information/transport/other-local-transport-schemes/>

The further details on the website include;

- A simulation video of the proposed junction operating with predicted traffic flows (including known development traffic) at the opening date, compared with the existing arrangement operating under the same conditions
- Information on predicted queuing and journey time reductions generated by the scheme
- Computer generated 3D images of the proposals
- A detailed layout plan of the project highlighting its main features

Contact Us

Should you have any queries/comments or require any further information please contact us at;

A63brough@eastriding.gov.uk

Further Information

This information can be made available in other languages or formats if required. To request another format, please contact us at the above e-mail address.

Data Protection

Any information you provide will be anonymous and kept confidential by East Riding of Yorkshire Council in accordance with the Data Protection Act 2018.



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