Appendix 6

10 December 2025 Comments and Appraisal - Eastbourne Station BSIP

Local Members: Councillors Stephen Holt, Pat Rodohan and Brett Wright

Enterprise Shopping Centre Proposal (GTA)	**ESCC Original Scheme Proposal (TR01)**
• signal timing improvements at the Upperton Road/The Avenue and Gildredge Road/Susans Road/Terminus Road traffic signal-controlled junctions; • retaining the status quo with two lanes on Station Parade for general traffic and staggered crossing • an extension of the existing Eastbourne Station bus stop to accommodate two buses. • Enable vehicles to u-turn at the southern arm of the Upperton Road/The Avenue junction	• signal timing improvements at the Upperton Road/The Avenue and Gildredge Road/Susans Road/Terminus Road traffic signal-controlled junctions; • introduction of an eastbound bus lane on Station Parade from south of Wharf Road to Station roundabout incorporating the Eastbourne Station bus stop • straight across crossing on Station Parade • enforcing the existing u-turn restriction on the Upperton Road southern arm of at the Upperton Road/The Avenue junction

Terminus Road / Gildredge Road traffic signal controlled junction

The Terminus Road/Gildredge Road/Susans Road signalised junction was amended as part of the Eastbourne Town Centre Phase 1 improvements. In developing the Eastbourne Station bus priority scheme, it was identified that further refinements to the signals could provide greater priority and benefits for buses utilising the junction through into Terminus Road and the bus stops in Cornfield Road, as well as from the bus lane in Gildredge Road.

Amendments to the traffic signal priority at the Terminus Road/Gildredge Road have already been implemented as part of the wider package of Bus Service Improvement Plan (BSIP) improvements to traffic signal-controlled junctions across the county.

Upperton Road/The Avenue traffic signal-controlled junction improvements.

In addition, further journey time benefits for general traffic and buses had been identified to the Upperton Road/The Avenue traffic signal-controlled junction as part of the bus priority scheme proposals. These would be achieved through modifications to enhance the efficiency of the signal-controlled junction realised by:

- amending the signal phasing to allow the left turn out of The Avenue to operate in parallel to the right turn into the Avenue. To maximise these benefits, the existing U-turn ban on the Upperton Road/Station Parade (south) arm of the signalised junction needs to be enforced which was included in the TRO proposals.
- using dynamic signal timings to optimise and adjust 'green' periods based on prevailing traffic conditions at each approach in real time, reducing the length of 'green' periods when traffic is absent or minimal.

The Enterprise Centre proposals also reference the benefits that The Avenue signal proposals would bring, however propose vehicles U-turn on the southern arm of the Upperton Road/The Avenue junction, which is currently a prohibited but non-enforced manoeuvre.

Proposed bus lane and bus stop improvements- Traffic Regulation Order (TRO)

In response to the bus lane proposal along Station Parade, the Enterprise Shopping Centre have suggested an alternative proposal (GTA) which does not include the bus lane, but retains two lanes for general traffic on the approach to Station roundabout and provides an extended bus stop facility to accommodate two buses by the Station.

The Enterprise Shopping Centre proposals (GTA) have been assessed in relation to Government best practice and bus stop design guidance. This has highlighted various issues if they were to be implemented:

- The proposal does not meet best practice guidance or accessibility standards for bus stop design (transport for London).
- Buses would not be able to align with the kerb to access the second of the two stops by the Station, creating significant accessibility and safety risks for passengers, especially those using mobility devices;
- The proposed bus bay arrangement increases the complexity of bus manoeuvres, leading to longer dwell times as vehicles find it more difficult re-entering into traffic;
- The proposal does not adequately address the risk of taxis and delivery vehicles using the nearside traffic lane, throughout the day, causing delay to bus movements; and
- The lane configuration may confuse drivers and increase the risk of collisions or blockages at the stop.

In comparison, the current ESCC proposals (TR01) to introduce the bus lane into the Station bus stop that facilitate one stopping bus:

- realigns the bus stop to ensure buses can consistently and safely align with the kerb, improving accessibility and reducing risks for all users; and
- provides clearer, more enforceable road space for buses, smoother traffic flow, and better integration with the surrounding road network.

Therefore, the Enterprise Centre proposal (GTA) for the two-space bus stop by the Station would pose operational and safety challenges compared to current proposals which offer a safer, more accessible and operationally efficient solution for the Eastbourne Station bus stop.

Modelling assessment

The modelling assessment from the Enterprise Shopping Centre for their proposals (GTA), and specifically the operation of the Station roundabout, had been assessed by their consultants using Arcady modelling software. Arcady is an analytical, mathematical based modelling approach that is normally used for standalone or small groups of junctions. It is not able to model the interaction between junctions or the complexity of traffic movements on the road network.

In comparison, the Vissim micro-simulation modelling approach that the County Council has used to assess the current bus priority proposals is based on the individual vehicle movements utilising the traffic data collected in August and September 2024. Vissim is appropriate for modelling complex and dynamic interactions between vehicles on the road network and different junction types, and especially where roadspace is being re-designed to accommodate different modes. Therefore, Vissim is an appropriate tool for modelling the introduction of bus priority measures in Eastbourne town centre.

In order to provide a direct compare and contrast of the cumulative journey time benefits, the Enterprise Shopping Centre proposals (GTA) have been replicated in the existing Vissim micro-simulation model to provide a like-for-like comparison with the current ESCC proposals.

In addition, two further options have been assessed and for comparison:

- (TR02) an alternate to the current East Sussex proposal with the retention of the staggered crossing in lieu of the straight across crossing on Station Parade; and
- (DN) do nothing except improve the traffic signals at Terminus Road/Gildredge Road junction.

The assessment of the various options has also applied nationally defined traffic growth factors for 2024 to 2034 for cars (5.5%), light goods vehicles (LGVs – 8%) and heavy goods vehicles (HGVs – 2%).

The outputs from the like for like modelling assessment, in relation to both bus journey times and general traffic journey times (not including buses), identifies that:

- Bus journey times
  - With the provision of the staggered crossing instead of the existing proposed straight across crossing on Station Parade, it provides the most positive outcome for bus journey times in both the am and pm peaks. The new signal phasing assists buses turning out of The Avenue, alongside the length of bus lane, and ensures improved eastbound bus journey times.
  - In comparison, the Enterprise Shopping Centre proposal (GTA) performs marginally worst to the above option on most modelled routes through the network.

- General journey times (not including buses)
  - The retention of the staggered crossing (TR02) performs best for all vehicles. Whilst eastbound movements, and the movement from the Station to Southfields Road performs better with the Enterprise Shopping Centre proposal (GTA), other journey times are similar or improved despite the removal of eastbound lane for general traffic to provide the proposed bus lane.

Therefore, the overall like-for-like scheme modelling appraisal indicates that the best performing scheme for buses and general traffic is the retention of the staggered crossing (TR02), which would modify the existing proposed eastbound bus lane scheme to provide a staggered rather than straight across crossing on Station Parade. This option ensures the material impact on general traffic is minimised whilst also improving journey time and reliability for bus movements on the corridor. The retention of the staggered crossing in lieu of the straight across crossing would not affect the advertised TRO restrictions.

Road Safety Audit (Stage 1)

The Enterprise Centre and their consultants have also raised concerns about the extent of comments in the Stage 1 Road Safety Audit undertaken on the Eastbourne Station bus priority scheme. Road Safety Audits are an essential part of a design review process. These audits are conducted independently of the design team by qualified road safety auditors, to proactively identify and mitigate potential safety issues in relation to all users.

A Stage 1 Road Safety Audit (RSA) was carried out for the A259 Upperton Road/Station Parade Bus Priority Scheme in January 2025. The presence of multiple ‘problems’ in a Road Safety Audit does not imply that the scheme is unsafe; rather, it demonstrates thorough evaluation and a commitment to enhancing both the new

proposals and existing road layout. Each of the issues identified by the audit team in the RSA is subject to review with a response provided by the designer, in discussion with the County Council as the overseeing organisation, prior to agreeing resolution of how the issue will be addressed within the design.

Of the 30 issues highlighted in the RSA1, 19 have already been addressed through agreed actions, many of which have led to improvements in the scheme's design. The remaining 11 have either been discounted as no longer relevant since the scheme was de-scoped to remove the northbound bus lane from Station roundabout up and beyond the Upperton Road/The Avenue junction, or the designers have provided a clear explanation in response to the independent safety audit team's comments, meaning these remaining points are not considered 'open' issues.

A Stage 2 RSA would take place as part of the next design stage to ensure continued scrutiny and refinement of the design. This ensures that the RSA process is effectively contributing to a safer, more robust transport scheme as the design evolves towards construction.

Right turn into the Enterprise Centre and access

The scheme originally proposed to not enable the right turn into the Enterprise Centre from Station Parade. When the Stage 1 RSA was initially undertaken, the scheme originally included a westbound bus lane (from Station roundabout towards and beyond The Avenue junction) which meant drivers would be concentrating on moving into the right-hand lane at this point as the bus lane commenced opposite the Enterprise Centre entrance. The audit team raised concerns about vehicles being potentially rear-ended whilst waiting to turn right into the Enterprise Centre and consequently recommended that this manoeuvre should be prohibited.

However, the removal of the westbound bus lane reduces the level of risk of this occurring as the road width here is approx. 6.3m wide giving sufficient width for a stationary vehicle to be passed. As a consequence, in response to the objection received from the Enterprise Shopping Centre and following further assessment of the likely number of vehicles making this movement being minimal, it was recommended at the October 2025 Planning Committee to uphold, in part, the objection and enable the right turn into the Enterprise Centre from Station Parade to be made. It is still proposed to recommend, in part, upholding the previously raised objection and enabling this right turn manoeuvre into the Enterprise Centre car park.

Traffic Signal junction improvements – outside of scope of Traffic Regulation Order

Both the ESCC (TR01 & TR02) and The Enterprise Centre (GTA) options identify there would be benefits generated by changes to the traffic signal-controlled Terminus Road/Gildredge Road and Upperton Road/The Avenue junctions. The Enterprise

Shopping Centre proposals (GTA) have indicated that these alone would provide the adequate benefits for buses and therefore negating the need for the bus lane.