

## **MID SUSSEX DISTRICT COUNCIL DRAFT SITE ALLOCATIONS DPD PUBLIC CONSULTATION**

### **HIGHWAYS AND TRANSPORT TECHNICAL NOTE IN RESPECT OF LAND NORTH OF THE A2300, GODDARDS GREEN, BURGESS HILL, WEST SUSSEX**

**14<sup>TH</sup> NOVEMBER 2019**

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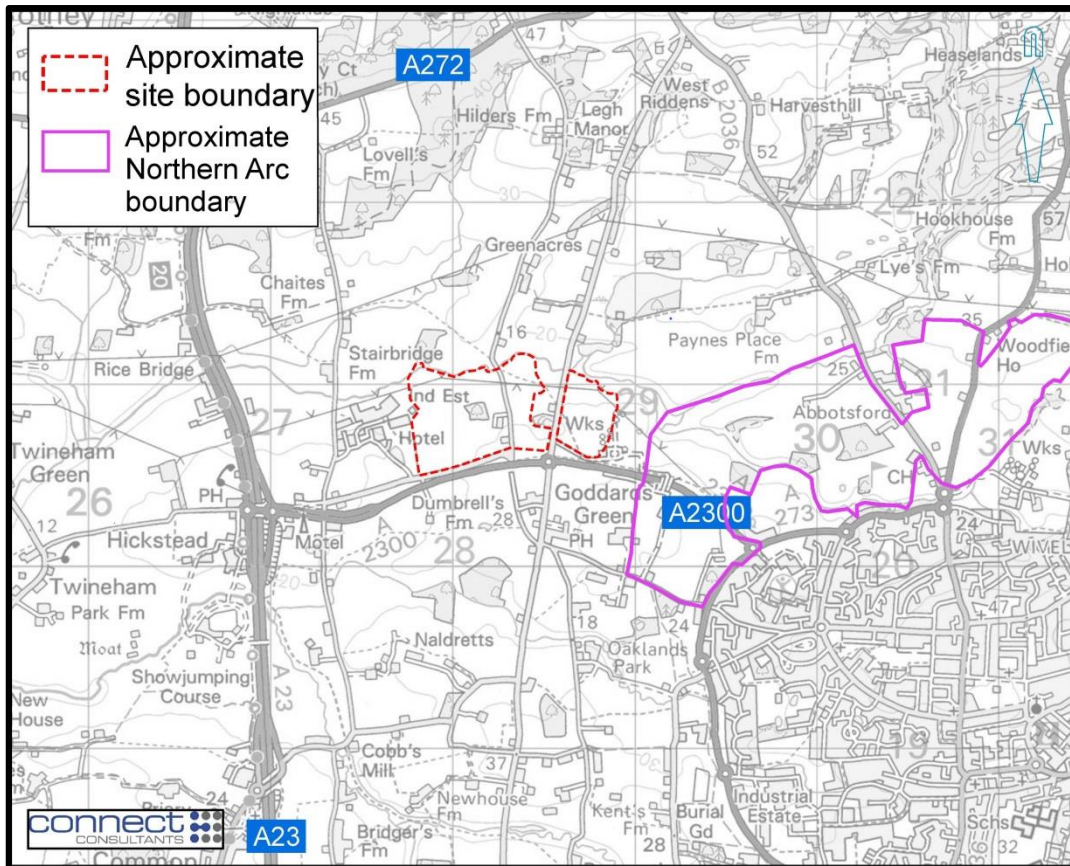
#### **1.0 Introduction**

- 1.1 Connect Consultants Limited is a firm of transport planning and highway design consultants that have been instructed by Glenbeigh Developments Ltd and Wortleford Trading Company Ltd in relation to the promotion of their land to the north of the A2300 at Goddards Green, West Sussex, for a future Science & Technology Park, known as Project Newton.
- 1.2 This is in the context of the Mid Sussex District Council Draft Site Allocations DPD (Regulation 18) Public Consultation, in which Mid Sussex District Council (MSDC) has identified the Project Newton site, on the north of the A2300, as the preferred location for a Science & Technology Park (S&TP).
- 1.3 This Technical Note (TN) has been prepared in response to the highways and transport evidence base published by MSDC alongside the Draft DPD, which draws on strategic traffic modelling undertaken on behalf of MSDC by SYSTRA.
- 1.4 A subsequent TN will be prepared by Connect Consultants following the completion of additional strategic traffic modelling, which SYSTRA has been instructed to undertake on behalf of Project Newton.

#### **2.0 Site Context**

- 2.1 The proposal site is located to the north of Goddards Green, bounded by the A2300 on its southern side and bisected by Cuckfield Road on its eastern side. The A2300 provides a key road link to Burgess Hill to the east and A23 to the west. Cuckfield Road connects to neighbouring settlements to the north and south of the site.
- 2.2 The location of the proposal site, in the context of the urban area, is presented at Figure 2.1.

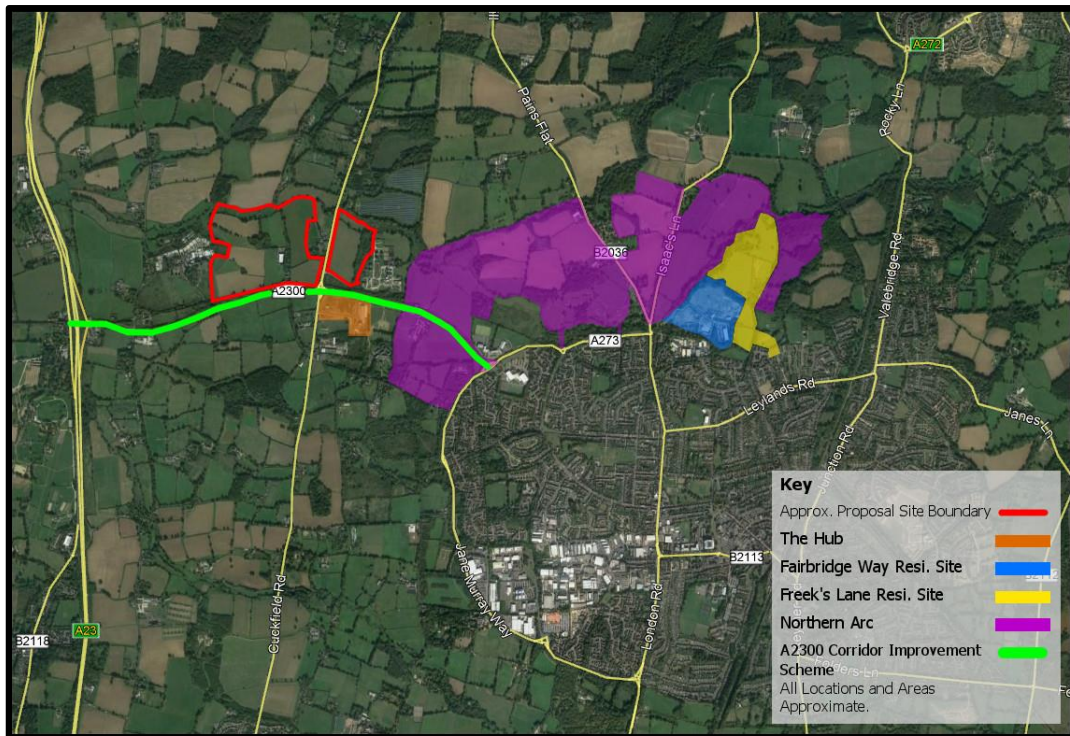
**Figure 2.1 – Site Location Plan**



Source: Promap

2.3 Figure 2.2 shows the area north and west of Burgess Hill, showing the approximate areas of local major planned/committed developments, along with the proposed A2300 Corridor Improvement Scheme.

**Figure 2.2 – Proposal Site Context**



Source: Google

### 3.0 Mid Sussex Transport Study

- 3.1 To support the Site Allocations DPD, Mid Sussex District Council commissioned SYSTRA to run a strategic highway model to inform and update the Mid Sussex Transport Study (MSTS). This identifies the impact of proposed site allocations on the strategic and local transport networks, as well as analysis on the proposed environmental and road safety impact, in compliance with National Planning Policy Guidance on transport evidence bases for plan-making.
- 3.2 The purpose of the transport study is to inform housing and employment site allocations and:
- 1) Assess the capacity performance at local road network links/junctions for proposed Site Allocations DPD development scenarios;
  - 2) Inform the consideration of the sustainable transport options and assumptions to be incorporated into the Site Allocations DPD evidence base; and the Mid Sussex Infrastructure Delivery Plan;
  - 3) Address the requirements of West Sussex County Council (WSSC) and Highways England (HE), both of whom aim for a sustainable approach to transport with the common objective of managing travel demand to minimise congestion, delays and adverse environmental / safety impact;

- 4) Be in general conformity with current Government planning practice guidance on transport evidence bases in plan making and in line with current best practice; and
  - 5) Identify forecast changes in traffic flow on roads entering the Ashdown Forest, as a result of proposed housing and commercial development in Mid Sussex and provide results in a format that can be readily interpreted and used for the air quality (i.e. eutrophication by nitrogen deposition) and ecological interpretation work.
- 3.3 A total of eight future development scenarios were tested against a 2031 Reference Case Scenario including up-to-date highway infrastructure and development commitments and background growth, acting as a baseline for assessing the impact of proposed site allocation development.

#### **Selection of S&TP North Site compared to South Site**

- 3.4 Scenarios 2 and 3 of the MSTS were used for the comparative assessment of the northern and southern sites for the S&TP allocation, whereby the Project Newton site to the north of the A2300 is included in Scenario 2, and the site to the south of the A2300 is included in Scenario 3.
- 3.5 The MSTS focussed on Scenario 2c, which includes the upgrading of the A2300/Cuckfield Road roundabout to a 'hamburger' roundabout, which is one of the three proposed vehicular access options suggested in pre-application discussions between the Project Newton team and WSCC.
- 3.6 Scenario 2c and Scenario 3 are identical in terms of assumed future development and infrastructure, save for the location and scale of the S&TP, and the associated access arrangements to each site option.
- 3.7 If it is assumed that the scale and mix of uses of the S&TP is the same for each of the two site options, it is realistic and reasonable to expect that the traffic impact across the wider District area will be broadly the same for both options. The key differences between the two site locations will likely be realised at the more local junctions, where the effect of different routing of the development traffic is more pronounced.
- 3.8 Notwithstanding the above, the scale and mix of uses of the S&TP differs between Scenario 2c and Scenario 3, with Scenario 2c assessing a larger quantum of S&TP development on the north site and Scenario 3 assessing a smaller quantum S&TP on the south site.
- 3.9 In traffic terms, the Scenario 2c S&TP (north site) has 2,936 vehicle trips in the AM peak hour and 2,440 vehicle trips in the PM peak hour.
- 3.10 The Scenario 3 S&TP (south site) has only 1,776 vehicle trips in the AM peak hour and 1,587 vehicle trips in the PM peak hour; 1,160 fewer vehicles than Scenario 2c in the AM peak, and 853 fewer vehicles in the PM peak.
- 3.11 In other words, the south site is assessed with c.35-40% less traffic than the north site.

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- 3.12 Despite the significant difference in scale and traffic movements associated with the two options, the MSTs Scenarios 2c and 3 show that the Project Newton (north) site (Scenario 2c) will have less traffic impact than the south site.
- 3.13 The term 'traffic impact' is measured in this instance by the number of junctions at which the modelling predicts a 'severe' or 'significant' impact.
- 3.14 A 'severe' impact is defined by SYSTRA in this context as a junction with any approach arm experiencing either of the following:
- a junction with an increase in ratio of flow to capacity (RFC) of 10% or more to an RFC of 95% or more in any period in any Scenario; or
  - an increase in average delay of one minute or more to an average delay of two minutes or more in any period in any Scenario.
- 3.15 A 'significant' impact is defined by SYSTRA as a junction with any approach arm experiencing the following:
- a junction with an increase in ratio of flow to capacity (RFC) of 5% or more to an RFC of 85% or more in any period in any Scenario.
- 3.16 The overarching conclusion is that while Scenario 2c results in 9 'significant' impacts compared to 7 in Scenario 3, Scenario 2c has only 11 'severe' impacts compared 12 'severe' impacts in Scenario 3. This distinction contributed to the selection of the northern site as the preferred site.
- 3.17 As the north and south site options were not assessed on a like-for-like basis, it is probable that the results of the traffic impact comparison are skewed in favour of the smaller development quantum of the south site, and it is therefore likely that a true like-for-like assessment would demonstrate that there is a greater difference between the two, in favour of the Project Newton site.
- 3.18 Connect Consultants has analysed the SYSTRA modelling reports and the associated outputs to better understand the differences in modelled junction performance between the two scenarios with the different S&TP locations.
- 3.19 The results of our analysis are summarised in a table in Appendix A, which sets out a list of the modelled junctions at which there are 'significant' and 'severe' impacts in either Scenario 2c (assessing the S&TP north site) or Scenario 3 (assessing the S&TP south site).
- 3.20 As would be expected, the impact at many junctions is the same for both scenarios, but for those junctions at which there are differences between the two scenarios, the table includes notes and observations about the detailed elements of the modelling results which lead to the reported differences.
- 3.21 There are five junctions at which the northern site is shown to have a greater impact than the southern site, of which three are 'significant' and two are 'severe'.
- 3.22 The details of the modelling results at those specific junctions reveal that Scenario 2c is reported as being in a worse-performing category than Scenario 3 due to only very minor differences in the modelling output.
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- 3.23 For example, at the B2028/B2037 Copthorne junction, Scenario 2c has just a 1% higher RFC on one approach than Scenario 3, which pushes Scenario 2c over the threshold from 'OK' to 'significant', despite there being no associated increase in queues or delay.
  - 3.24 In another example, at the A23/A281 eastbound on-slip junction, Scenario 2c has delay that is 45 seconds longer than Scenario 3, which pushes Scenario 2c from 'significant' to 'severe', but the equivalent queue length is only three vehicles compared to two vehicles in Scenario 3.
  - 3.25 Whilst only five very small differences in junction performance have led to Scenario 2c being allocated a 'worse' category than Scenario 3, it must be borne in mind that this is on the basis of Scenario 2c assessing a significantly greater amount of development traffic.
  - 3.26 In other words, even though Scenario 2c has significantly more development traffic than Scenario 3, its modelled traffic performance is not commensurately more severe than that of Scenario 3.
  - 3.27 The Project Newton team has commissioned SYSTRA to undertake an additional round of strategic traffic modelling to include a more realistic like-for-like assessment, in which the two potential locations of the S&TP are compared using the same scale and mix of uses in both locations; the only difference being the sites' access arrangements and the associated difference in traffic distribution.
  - 3.28 It is likely that the additional modelling will show a greater difference in traffic impact in favour of the Project Newton site.
  - 3.29 The additional modelling will also provide the predicted S&TP traffic flows and distribution, based on the most up-to-date MSTS development assumptions.
  - 3.30 A subsequent TN will be prepared and submitted once the additional modelling has been completed. The TN will set out the results of the like-for-like traffic impact comparison, and will also include a junction capacity assessment of the proposed Project Newton access junction.

#### **Assessment of the Refined Scenarios Incorporating the Project Newton Site.**

- 3.31 The MSTS Scenarios 7 and 8 represent the assessment of the refined, most up-to-date scenarios which have informed the Draft Site Allocations DPD. Both of these scenarios include the Project Newton site to the north of the A2300 as the preferred S&TP allocation.
- 3.32 Both Scenarios 7 and 8 include the same assumptions about the S&TP in terms of the location, scale, mix of uses, and number of traffic movements; the differences between the two scenarios are associated with potential residential development sites within the District.
- 3.33 Scenarios 7 and 8 are assessed initially without any traffic mitigation beyond the planned and committed improvements included in the Reference Case; an additional 'with mitigation' assessment has been undertaken of each of Scenarios 7 and 8, which tests the ability of various mitigation measures to remove 'severe' impacts at junctions.

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Without Mitigation

- 3.34 The SYSTRA modelling report "*Transport Impact of Scenarios 7 and 8*" notes that both scenarios generate significant additional traffic, notably on the A2300 and surrounding roads, and the A23/A2300 junction.
- 3.35 This is attributed by SYSTRA to the traffic associated with the S&TP, and the recommendation is made by SYSTRA that mitigation measures should focus on the impact at the A23 / A2300 junction.
- 3.36 Scenarios 7 and 8 are noted to have similar levels of impact on the section of the A23 between M23 junction 9 and the A23 / A273 junction at Pyecombe.
- 3.37 The traffic impact on the A23 is noted as being tidal, with the southbound carriageway being impacted in the AM and the northbound carriageway in the PM. Again, this is attributed by SYSTRA to being largely due to traffic commuting to/from the S&TP.
- 3.38 A total of eight junctions are predicted to have 'severe' impacts in both Scenarios 7 and 8:
- A272 / B2036, Ansty
  - A23 / A2300 Southbound On-Slip, Burgess Hill
  - A23 / A2300 Eastern Roundabout, Burgess Hill
  - A2300 / Northern Arc Spine Road, Burgess Hill
  - Junction Road / B2113, Burgess Hill
  - A273 / B2116 (Stonepound), Hassocks
  - A23 / A281 Eastbound On-Slip, Pyecombe
  - Valebridge Road / Junction Road / Leylands Road, Burgess Hill

With Mitigation

- 3.39 The SYSTRA report focusses initially on sustainable measures as the most effective form of mitigating highway impacts. These sustainable measures and their effect are reflected in the modelling in terms of percentage reductions of the traffic associated with specific development sites.
- 3.40 The proposed sustainable mitigation for the S&TP is assumed to reduce car trips to/from the site by 3%, via three measures identified in the SYSTRA modelling report as:
- Improved PT interchange Burgess Hill
  - Bus Shelters within development with RTI (Real Time Information)
  - Bus Services to Burgess Hill and station
- 3.41 Physical highway mitigation measures are subsequently proposed and assessed in the modelling to directly address the 'severe' impacts which are not resolved by the sustainable mitigation measures.
- 3.42 The physical highway mitigation measures closest to and most relevant to the S&TP site are proposed as:

- A23 / A2300 southbound on-slip: Improvements to slip road and merge, but SYSTRA note that this is not included in the modelling "*due to limited options*".
  - A23 / A2300 eastern roundabout: Free flow for A23 southbound off-slip to A2300 and partial signalisation.
  - A2300 / Cuckfield Road: 'Hamburger' roundabout as per the preferred option for the S&TP access junction, however, this is included in the 'without mitigation' scenario.
- 3.43 The results of the 'with mitigation' assessment show that the number of 'severe' impacts is reduced from eight to just two junctions:
- A272 / B2036, Ansty
  - A23 / A2300 southbound on-slip, Burgess Hill
- 3.44 It is noted in the SYSTRA commentary that the A23 / A2300 southbound on-slip merge was not addressed by physical highway mitigation due to limited options without major works on the A23, rather, the mitigation focussed on releasing a bottleneck at the A23 / A2300 junction eastern roundabout. The releasing of the bottleneck is noted to contribute to the 'severe' impact at the southbound on-slip merge, which is predicted predominantly in the PM peak hour.
- 3.45 Of the predicted 650 vehicles using the southbound on-slip in the PM peak hour, 175 are from the S&TP.
- 3.46 SYSTRA notes that a 10% reduction in the predicted future traffic (i.e. 65 fewer) on the southbound on-slip could remove the 'severe' impact.

#### **4.0 Commentary in Support of the Project Newton S&TP**

- 4.1 The SYSTRA modelling of Scenarios 7 and 8 assumes that the three sustainable mitigation measures, as proposed in the modelling, will reduce S&TP traffic by 3%.
- 4.2 As set out in the Project Newton Positioning Statement, which accompanies the Project Newton Representation, the Project Newton Sustainable Access Strategy is far broader and more comprehensive than the three measures assumed in the modelling, and is likely to achieve a significantly greater mode shift towards sustainable travel than the 3% assumed in the SYSTRA modelling. It is envisaged at mode-shift of at least 10% will be realised.
- 4.3 The western parts of the adjacent Northern Arc development site are within walking distance of the Project Newton site, and the Project Newton masterplan includes numerous links and connections, which means that a significant area of residential land, as well as bus stops within the Northern Arc development, will be within walking distance.
- 4.4 There are also links to the adjoining Bolney Grange Business Park, providing additional non-car permeability with the surrounding land uses.



- 4.5 As part of the A2300 Corridor Improvement Scheme, a footway / cycleway will be provided along the route's northern side between the A2300 / A23 interchange and Burgess Hill. The route passes the Project Newton site's southern boundary, thereby providing the site with a good quality, attractive, local and longer-distance pedestrian/cycle route.
- 4.6 The Project Newton site is located within walking distance of the nearby Hub employment development and its associated sustainable transport links, including a pedestrian and cycle route to Burgess Hill via Gatehouse Lane, and the provision of a signal-controlled pedestrian and cycle crossing over Jane Murray Way in Burgess Hill, where it intersects with Gate House Lane. These links will provide a safe, low-trafficked connection between the Project Newton site and Burgess Hill.
- 4.7 There is a significant local population located within cycling distance of the site including most of Burgess Hill, Hurstpierpoint, Sayers Common, Ansty, and Goddards Green. The entire Northern Arc site is also within cycling distance.
- 4.8 Connect Consultants is engaged in ongoing discussions with Metrobus, the local bus operator, to explore opportunities to provide an exemplar 'superhub' immediately adjacent to the Project Newton site's junction with the A2300, which would include bus facilities along with flexible working space, a café/restaurant, cycle shop/repair facility, taxi pickup/drop off point etc., so that it would be a vibrant work and meeting place as well as the focus for sustainable travel to and from the site.
- 4.9 The superhub would be close enough to the Northern Arc development for there to be a synergy between the public transport strategies for the two developments.
- 4.10 Metrobus has suggested that as well as enhancing existing services near the site, it would be possible to introduce a new Fastway service to build on the success of the 10, 20 and 100 services, to provide a new service between Gatwick, Crawley, Burgess Hill and Brighton.
- 4.11 In this way, the Project Newton Sustainable Access Strategy will provide additional benefits to the wider population which would achieve a wider-reaching regional mode-shift than just the S&TP users.
- 4.12 As such, it is entirely feasible that the 10% reduction of predicted future traffic using the A23 / A2300 southbound on-slip, as cited by SYSTRA, will be realised in the advent of the Project Newton S&TP.
- 4.13 In addition to the Sustainable Access Strategy, we are in dialogue with Highways England (HE) with regard to their aspirations for future large-scale improvements to the A23 / A2300 interchange. As the proposals for the Science & Technology Park progress, dialogue with HE and WSCC will continue in order to identify whether any additional improvements or mitigation will be required in this location.
- 4.14 The Project Newton site will be delivered through a phasing strategy; experience suggests that five phases comprising approximately 20,000sq.m will be delivered over a period of ten years.
- 4.15 It is acknowledged that the timing and scale of the Project Newton phases will be dependent upon the delivery of third-party infrastructure, in particular the delivery of the planned A2300 Corridor Improvement Scheme, and also the mechanisms and ability to deliver the public transport strategy.

- 4.16 The Project Newton Phasing Strategy will incorporate flexibility in terms of scale and timing of each phase, in conjunction with traffic modelling and transport assessment, and through ongoing engagement with WSCC, Highways England, and Metrobus, to ensure that each phase can be acceptably accommodated and is appropriately mitigated.

## 5.0 Conclusions

- 5.1 Mid Sussex District Council commissioned SYSTRA to run a strategic highway model to inform and update the Mid Sussex Transport Study (MSTS) to support the Site Allocations DPD.
- 5.2 MSTS Scenarios 2c and 3 were used for the comparative assessment of the northern and southern sites for the S&TP allocation, whereby the Project Newton site to the north of the A2300 is included in Scenario 2c, and the site to the south of the A2300 is included in Scenario 3.
- 5.3 The south site is assessed with c.35-40% less traffic than the north site.
- 5.4 Despite the larger quantum of S&TP development assessed in Scenario 2c, the modelling predicts that the Project Newton site will have fewer severe impacts than the southern site, and at some of the junctions where Scenario 2c is shown to be worse than Scenario 3, the categorisation is based on negligible differences in performance.
- 5.5 Project Newton has commissioned SYSTRA to undertake an additional round of strategic traffic modelling to include a more realistic like-for-like assessment, which will likely show a greater difference in traffic impact in favour of the Project Newton site.
- 5.6 A subsequent TN will be prepared and submitted once the additional modelling has been completed.
- 5.7 MSTS Scenarios 7 and 8 represent the assessment of the refined, most up-to-date scenarios which have informed the Draft Site Allocations DPD. Both of these scenarios include the Project Newton site to the north of the A2300 as the preferred S&TP allocation.
- 5.8 The SYSTRA modelling assumes that the three sustainable mitigation measures, as proposed in the modelling, will reduce S&TP traffic by 3%.
- 5.9 The results of the 'with mitigation' assessment show that the number of 'severe' impacts is reduced from eight to just two junctions:
- A272 / B2036, Ansty
  - A23 / A2300 southbound on-slip, Burgess Hill
- 5.10 SYSTRA notes that a 10% reduction in the predicted future traffic (i.e. 65 fewer vehicles) on the A23/A2300 southbound on-slip could remove the 'severe' impact.
- 5.11 The proposed Project Newton Sustainable Access Strategy is far broader than the three measures assumed in the modelling, and will provide additional benefits to the wider population which would achieve a wider-reaching regional mode-shift than just the S&TP users.
- 5.12 By virtue of the site's proximity to the Northern Arc development, there will be a synergy between the public transport strategies for the two developments.

- 5.13 As such, it is entirely feasible that the 10% reduction of predicted future traffic using the A23 / A2300 southbound on-slip, as cited by SYSTRA, will be realised in the advent of the Project Newton S&TP.
- 5.14 The Project Newton Phasing Strategy will incorporate flexibility in terms of scale and timing of each phase, in conjunction with traffic modelling and transport assessment, and through ongoing engagement with WSCC, Highways England, and Metrobus, to ensure that each phase can be acceptably accommodated and is appropriately mitigated.
- 5.15 In light of all of the above, there is no doubt that the Project Newton site should be allocated as the preferred S&TP site.

**APPENDIX A – ANALYSIS OF MSTs JUNCTION IMPACT RESULTS**

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List of modelled junctions at which there are 'significant' and 'severe' impacts in either Scenario 2c (assessing the S&TP north site) or Scenario 3 (assessing the S&TP south site)					
Junction ID	Area	Name	Scenario 2c Impact	Scenario 3 Impact	Observations on the differences in results between the two scenarios
N1	Copthorne	A264/A2220 Copthorne	Significant	Significant	
N4	Copthorne	B2028/B2037 Copthorne	Significant	OK	The only difference being that Scenario 2c shows a total of 1849 vehicles through the junction in the PM peak hour, which is only 12 vehicles more than in Scenario 3 (even though Scenario 3 generates 853 fewer vehicles in the PM peak than Scenario 2c). This difference of 12 vehicles results in a difference of only 1% of the RFC on the B2037 (west) approach, and no difference in the predicted queue lengths or delay at the junction. The 1% difference places Scenario 2c into the 'significant' category'.
N7	Crawley Down	B2028 Turners Hill Road / Wallage Lane	Severe	Severe	
N8	Turners Hill	B2110/B2028 Turners Hill	OK	Severe	Despite Scenario 2c generating c.35-40% more traffic than Scenario 3.
N10	West Hoathly	Selsfield Road/Vowels Lane	Significant	Significant	
C1	Handcross	B2114 Junction, Handcross	Significant	OK	The only difference being that Scenario 2c shows a total of 1794 vehicles through the junction in the AM peak hour, which is only 51 vehicles more than in Scenario 3 (even though Scenario 3 generates 1160 fewer vehicles in the AM peak than Scenario 2c). This difference of 51 vehicles results in a difference of only 7% of the RFC on the B2110 (west) approach (79% in Scenario 3; 86% in Scenario 2c), and no difference in the predicted queue lengths or delay at the junction. The 7% difference in RFC places Scenario 2c into the 'significant' category'.
C3	Slough Green	B2115 Junction, Slough Green	Significant	Significant	
C4	Haywards Heath	Borde Hill Lane/Copyhold Lane	Severe	Severe	
C5	Haywards Heath	B2114/B2036 Whitemans Green	Significant	Significant	
C6	Haywards Heath	B2036/Ardingly Rd, Whitemans Green	Severe	Severe	
C7	Haywards Heath	A272/B2036	Severe	Severe	
C9	Cowfold	A281 south junction, Cowfold	OK	Significant	Despite Scenario 2c generating c.35-40% more traffic than Scenario 3.
C10	Bolney	A23/A272 Bolney Road	Severe	Severe	
C11	North Chailey	A272/A275 North Chailey	Severe	Severe	
C12	Haywards Heath	A273/Isaacs Lane/Traustein Way	Significant	OK	The difference between the two is that Scenario 2c shows a total of 2832 vehicles through the junction in the PM peak hour, which is 137 vehicles more than in Scenario 3 (even though Scenario 3 generates 853 fewer vehicles in the PM peak than Scenario 2c). This difference of 137 vehicles results in Scenario 2c showing the PM peak RFC on the A273 (w) approach which is 14% higher than Scenario 3, which equates to queue lengths which are only 1 vehicle longer, and delay which is only 1 second longer. The increase in RFC places Scenario 2c into the 'significant' category.
S1	Burgess Hill	A23/A2300 southbound on-slip	OK	Severe	Despite Scenario 2c generating c.35-40% more traffic than Scenario 3.
S2	Burgess Hill	A23/A2300 eastern roundabout	Severe	Severe	
S3	Burgess Hill	A2300/Cuckfield Road	Significant	Severe	Despite Scenario 2c generating c.35-40% more traffic than Scenario 3.
S6	Burgess Hill	Junction Road/B2113, Burgess Hill	Severe	OK	The difference between the two is that Scenario 2c shows a total of 1328 vehicles through the junction in the AM peak hour, which is only 11 vehicles more than in Scenario 3 (even though Scenario 3 generates 1160 fewer vehicles in the AM peak than Scenario 2c). This difference of only 11 vehicles results in Scenario 2c showing AM peak delay on the B2113 (s) approach which is 55 seconds longer than Scenario 3, queue lengths which are 2 vehicles longer, and RFC 3% higher. The increase in delay places
S7	Hurstpierpoint	B2117/B2116 Hurstpierpoint	Severe	Severe	
S8	Hassocks	A273/B2116 Hassocks (Stonepound)	Severe	Severe	
S9	Pyecombe	A23/A281 eastbound on-slip	Severe	Significant	Scenario 2c shows a total of 4324 vehicles through the junction in the PM peak hour, which is 20 vehicles fewer than in Scenario 3 (even though Scenario 2c generates 853 more vehicles in the PM peak than Scenario 3). Despite Scenario 2c having fewer vehicles through this junction than in Scenario 3, the results show that in Scenario 2c the RFC is 3% higher and the delay is 45 seconds longer on the A23 (southbound) than in Scenario 3. Despite this equating to queue lengths only one vehicle longer in Scenario 2c than in Scenario 3, it places Scenario 2c in the 'severe' category.
S10	Ditchling	B2112/B2116 Ditchling	Significant	Significant	