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**PROJECT NEWTON SCIENCE & TECHNOLOGY PARK, BURGESS HILL**  
**TRANSPORT AND HIGHWAYS STATEMENT**  
**REGULATION 19, 28<sup>TH</sup> SEPTEMBER 2020**

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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 Dacorar (Southern) Limited 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 In the context of the MSDC Draft Site Allocations DPD Pre-Submission (Regulation 19) Consultation, MSDC has identified the Project Newton site as site SA9 – the location for the Science & Technology Park (S&TP).
- 1.3 At the Regulation 18 stage, Connect Consultants produced a Technical Note (TN), dated 14<sup>th</sup> November 2019, which was submitted in response to the highways and transport evidence base published by MSDC alongside the Draft DPD, and which referred to strategic traffic modelling undertaken on behalf of MSDC (the Mid Sussex Strategic Traffic Study model [MSTS]).
- 1.4 Project Newton commissioned additional MSTS modelling to be undertaken, to further inform the Regulation 18 consultation representation, and a second TN was produced and submitted by Connect Consultants, dated 16<sup>th</sup> January 2020.
- 1.5 Since the Regulation 18 stage, further work has been undertaken, including work with MSDC's strategic traffic modelling.
- 1.6 Connect and the Project Newton Design Team are continuing to work in close collaboration with West Sussex County Council (WSSCC) and Highways England, as well as with MSDC and their transport consultants, and have agreed with all parties a defined scope and methodology for the assessment of the Project Newton traffic effect.
- 1.7 As the technical analysis and traffic assessment are ongoing; this Transport and Highways Statement sets out the agreed scope/methodology of the traffic assessment, as agreed with all parties which includes developing a Mobility Strategy and which continues to include analysis of traffic flow data from MSDC's MSTS model.
- 1.8 It is intended that the outputs will support the promotion of the Project Newton site through MSDC's Regulation 19 consultation and to submission and Examination of the DPD. It is also proposed that this evidence-base work and joint partnership working will also be carried forward to support the future submission of a planning application. For this reason, the agreed approach seeks to meet the requirements of the following parties:

- Project Newton’s submission to the MSDC Regulation 19 consultation and subsequent planning application/s;
- MDSC’s requirements to inform the S&TP’s allocation in the Sites DPD;
- West Sussex County Council (WSCC) requirements as the Local Highway Authority;
- Highways England (HE) requirements as the highway authority responsible for the Strategic Road Network (SRN), namely the A23 in the vicinity of the S&TP.

## 2.0 Project Newton Mobility Strategy

2.1 The MSDC Submission Draft Site Allocations DPD sets out the specific requirements of site SA9: Science and Technology Park; an excerpt is provided below at Figure 2.1, showing the requirements for the specific topics of Sustainability and Highways and Access.

**Figure 2.1 – Excerpt from Submission Draft Site Allocations DPD: Site SA9**

Sustainability
<ul style="list-style-type: none"> <li>• Provision of electric vehicle charging points in accordance with the Council’s adopted standards.</li> <li>• Ensure the design would make the development future-ready for improvements in technology and sustainability such as (but not limited to) green technology, artificial intelligence and automation.</li> </ul>
Highways and Access
<ul style="list-style-type: none"> <li>• Provision of sustainable transport measures and other infrastructure requirements, including measures to mitigate impacts on the local and Strategic Road Network.</li> <li>• The first priority is to mitigate development impacts by maximising sustainable transport interventions. Remaining impacts must be addressed through physical highway mitigation measures in consultation with the local Highways Authority and Highways England.</li> <li>• Demonstrate that the development would not adversely affect the safe and efficient operation of the A23 and the A23/A2300 junction to the satisfaction of the local Highways Authority and Highways England.</li> <li>• Demonstrate that access can be achieved to the satisfaction of the Highways Authority, minimising disruption and delay on the A2300 and surrounding roads.</li> <li>• Provision of new bus routes or diversion of existing routes to connect with key hubs including railway and bus stations and Burgess Hill town centre.</li> <li>• Provision of new pedestrian and cycle links to ensure connectivity with the Northern Arc, The Hub (south of A2300), Burgess Hill and surrounding countryside.</li> <li>• Provision of pedestrian and cycle connectivity with Bolney Grange Business Park.</li> <li>• Provision of car parking and cycle storage in accordance with the Council’s adopted standards.</li> </ul>

- 2.2 A key element of the Project Newton S&TP has always been that it will incorporate a comprehensive sustainability strategy which will ensure that sustainable travel is at the centre of the development’s ethos. Part of this is also covered by the over-arching positioning document (September 2020) and the HNW sustainability strategy that has been submitted as part of the design team’s technical evidence base.
- 2.3 This aligns with the DPD requirement of Site SA9, and the first priority is to mitigate development impacts by maximising sustainable transport interventions.
- 2.4 The DPD also identifies the requirement to provide new and/or diverted bus routes, and new pedestrian and cycle links, to connect to the surrounding area.

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- 2.5 The Project Newton Mobility Strategy is an evolving strategy, being developed with regard to the Burgess Hill Public Transport Strategy (BHPTS) (2016), and also the Public Transport Strategy of the adjacent Northern Arc strategic development site.
- 2.6 Our emerging Mobility Strategy will provide a wide range of benefits to both the site itself and to the wider population which would achieve a wider-reaching regional mode-shift than just the S&TP users.
- 2.7 It is anticipated that the Mobility Strategy will include the following elements:
- Public Transport Strategy (incorporating bus viability analysis)
  - Walking and Cycling Strategy
  - On-Site Care Share Scheme
  - On-Site Electric Car Club
  - On-Site Bike-Hire Scheme

#### Agreed Approach

- 2.8 As part of the partnership working with MSDC, WSCC and Highways England we have agreed the following work will be covered by our Mobility Strategy:
- 2.9 Undertake further work on potential travel mode shift including the use of S&TP traffic origin/destination data extracted from the MSTs.
- 2.10 Refer to Census data and MSTs traffic data to understand more about the likely travel patterns that will be associated with Project Newton, to identify potential bus service improvements.
- 2.11 Undertake a bus viability study to consider the feasibility of potential bus service improvements, and subsequently identify the potential for travel mode shift.
- 2.12 Continue discussions and establish collaborations with the local bus operators Metrobus and Compass, electric car-club and cycle-scheme operators, as well as the Northern Arc development (Homes England), to align the public transport and sustainable access strategies and to ensure a realistic and feasible bus / public transport solution is possible, to address the requirement of the proposed SA9 allocation.
- 2.13 Project Newton to produce a robust and well-evidenced Mobility Strategy to target a 10% reduction in predicted vehicular trip rates associated with the S&TP to be agreed ahead of submission.

### **3.0 Junction Impacts, Mitigation, and Improvements**

- 3.1 Identify the predicted future traffic conditions at key local junctions in the MSTs '2031 Sites DPD' scenario both without and with the S&TP, to identify the specific level of impact of the proposed S&TP.

3.2 Key local junctions to include:

- A23/A2300 Hickstead dumbbell roundabout junction (as per forthcoming A2300 improvement scheme)
- A2300 / Stairbridge Lane / Pookbourne Lane (as per forthcoming A2300 improvement scheme)
- A2300 / Cuckfield Road roundabout (as per forthcoming A2300 improvement scheme)
- A2300 / Northern Arc Spine Road (yet to be constructed)
- A2300 / Jane Murray Way
- Cuckfield Road / B2036 south of Ansty
- A272/B2036 roundabout in Ansty

3.3 Assess the operation and capacity of the A23/A2300 Hickstead Junction and the A272/B2036 roundabout in Ansty in the '2031 Sites DPD' scenario without and with the S&TP to allow the identification of the need for S&TP-specific mitigation and the outline design thereof.

3.4 In line with the requirement of the proposed SA9 allocation, mitigation is to initially focus on maximising sustainable transport interventions to lead to a reduction in predicted S&TP traffic. The scale of modal-shift traffic reduction to be agreed with WSCC, Highways England, and MSDC through the Mobility Strategy. The remaining development traffic impacts will be addressed through appropriate physical mitigation measures.

3.5 Assess the predicted operation and capacity of the proposed S&TP access roundabout on Cuckfield Road (north of the A2300) and the proposed upgraded roundabout junction of the A2300/Cuckfield Road

A23/A2300 Hickstead

3.6 As this junction connects to part of HE's SRN, it is subject to a specific assessment methodology which has been agreed with Highways England.

3.7 The methodology for the A23/A2300 Hickstead junction is as follows:

- Modelling to be based on the forthcoming layout of the junction following completion of the WSCC A2300 improvement scheme (as included in the MSTS 2031 reference case).
- Use the computer modelling of the A23-A2300 junction, which was used in the WSCC A2300 Improvement Scheme Business Case, supplied by WSCC.
- Use traffic data extracted from the MSTS '2031 Sites DPD' scenario (as per the Regulation 19 evidence base).
- Test the operation and capacity of the future layout of the A23/A2300 Hickstead junction in the '2031 Sites DPD' scenario, and with the agreed reduction in predicted S&TP traffic (to be achieved through the Mobility Strategy's sustainable travel mode shift).

- Assess the need for physical mitigation, and identify appropriate mitigation measure/s (including a merge/diverge assessment in line with DMRB CD122).
- Test the effectiveness of the potential physical mitigation by incorporating it into the A23/A2300 Hickstead junction model.
- Provide MSDC/SYSTRADA with details of the identified physical mitigation measure/s to be coded into the MSTs to create a new scenario '2031 Sites DPD with mitigation' (or other appropriate name) which will simulate the resultant 're-routing' of traffic on the road network.
- Traffic flows from the 'with mitigation' scenario to be supplied to Connect to rerun the junction capacity assessment.
- Produce outline design of the appropriate proposed mitigation measure/s in accordance with DMRB standards, including WCHAR and RSA stage 1.
- Outline design of the proposed mitigation measure/s to be agreed with Highways England and WSCC.

#### Project Newton Phasing

- 3.8 Assess the traffic impact of the proposed Project Newton phases to identify the trigger point/s for mitigation measures, and the point at which the soon-to-be improved A2300/Cuckfield Road roundabout will need to be upgraded further.
- 3.9 MSTs model to be used to derive baseline traffic flows (excluding the S&TP traffic) at the study junctions for 2023, 25, 27, 29 and 2031, to represent the five two-year phases of Project Newton.
- 3.10 MSDC to supply development build-out trajectory to inform the baseline traffic conditions in each of the phases. WSCC / MSDC to supply estimates for completion of highway schemes during the phasing period.
- 3.11 Connect to add the traffic associated with each phase of Project Newton across the study area, based on the same S&TP traffic distribution as used in the MSTs.
- 3.12 Develop a phasing strategy for mitigation, to align with the overall Project Newton masterplan phasing.

#### **4.0 Conclusions**

- 4.1 Connect Consultants and our clients Dacora (Southern) Limited and Wortleford Trading Company Limited are committed to the delivery of the STP and a robust evidence base to support its allocation within the Site Allocations DPD.
- 4.2 Connect and the wider Project Newton design Team will continue to work alongside MSDC, WSCC and HE in partnership to complete the work ahead of submission and continue to work towards technical detail to support both the allocation and subsequent future planning applications