

PROJECT NEWTON SCIENCE & TECHNOLOGY PARK
TRANSPORT STATEMENT: STATEMENT OF COMMON GROUND
PREPARED FOR THE MID SUSSEX DISTRICT COUNCIL SITE ALLOCATIONS
DPD PRE-SUBMISSION (REGULATION 19) CONSULTATION
21ST MAY 2021 UPDATE – EXAMINATION UPDATE
Statement of Common Ground Between:

Connect Consultants



Vail Williams



Mid Sussex District Council



West Sussex County Council



Highways England



1.0 INTRODUCTION

- 1.1.1 Sections 1 and 2 of this document are materially unchanged from the previous Statement of Common Ground dated 24th November 2020; Section 3 provides an update on matters undertaken and agreed between December 2020 and the time of writing in May 2021.
- 1.1.2 This Statement of Common Ground is between West Sussex County Council (WSSC) as the Local Highway Authority, Mid Sussex District Council (MSDC) as the Local Planning Authority, and Highways England (HE) as the authority responsible for the Strategic Road Network of motorways and trunk road.
- 1.1.3 This statement reflects the work being undertaken as part of a project team led by Connect Consultants as highways consultants, and Vail Williams as planning consultants in regards to the 'Project Newton' Science and Technology Park (STP) proposed as part of the MSDC Development Plan Document (DPD) for Site Allocations up to 2031 under policy SA9. This supports the Adopted Local Plan Policy 2018 DP1 which sets out an aspiration to provide circa 1,000,000sq ft of floorspace and 2500 jobs of high quality Science and Technology Park.
- 1.1.4 The broad location for a Science and Technology Park "West of Burgess Hill" was identified and allocated within the Mid Sussex District Plan, adopted March 2018. The Site Allocations DPD seeks to specify the exact location for the STP, and set out a range of detailed policy requirements to inform its delivery at application stage. MSDC, as part of the regulation 18 and 19 stages of the DPD, have confirmed that the 'Project Newton' site proposed by Glenbeigh Developments Ltd / Dacorar Southern Ltd / Wortleford Trading Ltd is their preferred location.
- 1.1.5 Whilst MSDC has calculated its employment requirement, and proposed a number of smaller-scale allocations to meet this requirement in full as part of the DPD process, the STP allocation goes beyond what is required to meet identified employment needs.
- 1.1.6 The STP allocation within the DPD is therefore an aspirational allocation to support economic growth within the district and realises the need for a strategic employment allocation within the wider region, and this approach is supported by the Coast to Capital LEP. Similarly, the District Plan policy and subsequent allocation do not depend on the STP to be delivered in full within the plan period to 2031. To align with this, an approved phasing plan, which identifies development both within and beyond the plan period, has been included as a requirement of the DPD to ensure any delivery is supported by the necessary transport infrastructure.
- 1.1.7 The Project Newton STP site sits to the north of the A2300, accessed off Cuckfield Road north of the junction where Cuckfield Road meets the A2300 dual carriageway.
- 1.1.8 The Project Newton proposals identify 1.3 million square feet of commercial floor space across five phases of development, supported by a proposed upgrade to the A2300 – Cuckfield Road roundabout, whereby the roundabout is converted to a signal-controlled 'hamburger roundabout' on the A2300.
- 1.1.9 Ongoing work between all parties is looking to secure agreement on the methodology and approach to traffic modelling supporting the five STP phases, and any resultant mitigation design work required.

2.0 SCOPE OF WORK

- 2.1.1 Since the Project Newton site was identified as the preferred location for the STP, a Transport/Mobility Working Group has been set up across all signatories of this Statement of Common Ground to consider the overall mobility and access to and from the site, as a result of the STP allocation.
- 2.1.2 A Project Newton Mobility Strategy agreed by all parties to this SoCG, has been prepared through collaboration within the working group and has been agreed by all signatories. The Mobility Strategy is provided as document SA9.11 on the MSDC DPD website. Traffic modelling work at strategic and local levels has been undertaken cognisant of the targets of the Mobility Strategy.
- 2.1.3 Ongoing work continues to be undertaken to further assess the traffic effect on the surrounding road network, and to design mitigation proposals to minimise the impact of the STP at key junctions and to meet the requirements of HE and WSCC.
- 2.1.4 The draft DPD produced by MSDC requires that as part of any STP planning application, a phasing strategy is to be developed which sets out all transport mitigation required to enable each phase can be delivered, including any measures to mitigate impacts on the local and strategic road network.
- 2.1.5 The ongoing assessment work includes traffic projections through the five Project Newton phases up to 2031 and will identify the likely triggers for when and where mitigation is required, thereby identifying a mitigation phasing strategy.
- 2.1.6 The draft DPD also sets out that the first priority is to mitigate development impacts by maximising sustainable transport interventions. The Transport/Mobility Working Group signatories to this Statement of Common Ground have agreed the Project Newton Mobility Strategy and its target vehicle-trip reductions to/from key origin areas as a result of sustainable travel interventions covering walking, cycling and public transport.
- 2.1.7 The Mobility Strategy is supported by Bus Viability Study that has been shared with the signatories to the Statement of Common Ground.

2.2 Mobility Strategy

- 2.2.1 The Mobility Strategy incorporates a range of measures, initiatives and interventions to prioritise the reduction of traffic associated with the STP. These are set out below:
 - Walking and Cycling Strategy
 - Pedestrian and cycle links and connections to the adjoining residential and employment areas of Burgess Hill, including signal-controlled crossings of the A2300;
 - Provision of an arterial network of segregated cycle routes within the site;
 - Provision of fixed, public-use cycle pumps at key locations on site;
 - Charging facilities for electric bike and scooters;
 - On-site cycle shop with bike parts/spares and bike mechanic;
 - Provision of cycle route maps/boards at key locations around the site;
 - Provision of covered cycle shelters adjacent to the key buildings and destinations within the site, capable of accommodating more than 1,000 cycles;

- Provision of showers, changing rooms and drying rooms in all employment units;
- On-site bicycle user group (BUG);
- On-site bike-hire scheme;
- Green Commute Initiative bike scheme.
- On-site Car Share
- Electric Car Club
- Site-Wide Travel Plan
- Public Transport Strategy

2.3 Public Transport Strategy

2.3.1 The Public Transport Strategy which forms part of the Mobility Strategy looks at a variety of improvements to current public transport provision. These include the following enhancements of bus services:

- The diversion of the existing 100 service provides an immediate opportunity at no cost, which will provide a good opportunity for trips from Burgess Hill to be made by bus.
- The existing 35A/C routes should be extended and/or a new shuttle service be provided, to bolster the provision between Project Newton and Burgess Hill and the train station.
- The provision of a shuttle service from the outset will provide an attractive opportunity for Haywards Heath, Brighton and Crawley trips, as well as other longer-distance trips, to be made by a train-and-bus combination.
- The diversion of the 273 service to the STP would target trips from both Brighton and Crawley. An alternative to diverting the 273 service could be to extend the Project Newton Burgess Hill station shuttle service westwards to meet the 273 bus at the Hickstead stops.
- As both Project Newton and the Northern Arc come forward, the extension of the Northern Arc bus route will provide a connection between Project Newton, the Northern Arc, Burgess Hill and the train station.
- Continued liaison and partnership working with Homes England and MSDC on the interrelationship and opportunities with the Northern Arc are ongoing and will inform any detailed application stage

2.3.2 With effective use of demand management options, coupled with employee incentives, the target modal-shift trip numbers are agreed by all signatories as follows:

Burgess Hill @ 50% = 398 trips from car to bus

Brighton @ 25% = 55 trips from car to bus/rail

Haywards Heath @ 25% = 31 trips from car to rail

Crawley @ 10% = 7 trips from car to bus/rail

Total = 491 peak-hour trips shifted from car = 29% reduction from the total S&TP peak-hour trips (average 1,696 peak-hour trips).

2.4 Highway Mitigation

- 2.4.1 The wording in the Site Allocations DPD also requires policy SA9 to demonstrate that the STP would not adversely affect the safe and efficient operation of the A23 and the A23/A2300 Hickstead junction to the satisfaction of the local highways authority and Highways England.
- 2.4.2 The ongoing traffic modelling work undertaken in association and agreement with the Transport/Mobility Working Group considers the physical highway mitigation measures where and when required.
- 2.4.3 Design and costing work for mitigation improvements has followed on from traffic modelling, to identify the deliverability and viability/affordability of the improvements. These can then inform the District Council's scheduling of developer contributions. The cost estimates will need to be robust, including for optimism bias and contingencies and the design plans will give a clear indication of the land that is likely to be required to achieve them.

3.0 MAY 2021 UPDATE:

3.1 Highway Mitigation

- 3.1.1 In order to understand and account for any re-routing of traffic that may result from the implementation of the proposed capacity improvement schemes, a further round of strategic traffic modelling has been completed, to model the '*2031 Sites DPD with Physical Mitigation*' scenario.
- 3.1.2 The '*2031 Sites DPD with Physical Mitigation*' scenario includes capacity improvement schemes at the following junctions, as set out in Section 3 of the Statement of Common Ground 24th November 2020 (document reference SA9.10):
- A23-A2300 Hickstead junction east and west
 - A23-A2300 Hickstead junction southbound merge
 - A2300-Cuckfield Road roundabout
 - A2300-Northern Arc Link Road roundabout
 - A272-B2036 mini-roundabout, Ansty
- 3.1.3 The scope and methodology have been agreed by all parties in the working group.
- 3.1.4 The resultant '*2031 Sites DPD with Physical Mitigation*' scenario traffic flows have been extracted from the strategic traffic model, to be used in a further round of detailed junction capacity modelling of the study junctions and the proposed physical mitigation schemes.
- 3.1.5 While the MSTs modelling (used in the MSDC Regulation 19 evidence base) included a 3% reduction in STP traffic associated with model shift to sustainable travel, the '*2031 Sites DPD with Physical Mitigation*' scenario itself does not include any reduction in vehicle trip attraction to the STP associated with sustainable travel mode-shift.
- 3.1.6 The Mobility Strategy target vehicle-trip reductions have been subsequently applied by Connect Consultants to the '*2031 Sites DPD with Physical Mitigation*' traffic flow outputs, and the resultant reduced development-traffic flows have been used as an additional 'target' scenario in the junction capacity modelling.
- 3.1.7 The results of the '*2031 Sites DPD with Physical Mitigation*' scenario junction capacity modelling have informed some revisions to the capacity improvement schemes.
- 3.1.8 Principally, the initial design of the A2300 – Cuckfield Road 'hamburger' junction which is illustrated in the Project Newton Positioning Statement has been expanded to accommodate the modelled traffic demand. The expanded junction layout uses land entirely within Project Newton's boundaries and public highway boundary, and it does not adversely impact on the masterplan principles nor the development quantum. The revised 'hamburger' junction layout is provided at Appendix 1.
- 3.1.9 Also, an additional capacity improvement scheme has been identified at the A23-A2300 Hickstead west junction to accommodate the modelled PM peak traffic turning north on to the A23. The scheme can be delivered within existing highway land.
- 3.1.10 The revised capacity improvement schemes have been subject to independent Stage 1 Road Safety Audits, and Designer's Responses have been produced to address road safety issues where appropriate.

- 3.1.11 High level cost estimates have been prepared for each of the resultant physical mitigation schemes.
- 3.1.12 The proposed package of physical mitigation measures, along with the likely timing / triggers based on the STP Phasing, is set out in the tables at the end of this document.

3.2 Agreement of Common Ground

- 3.2.1 The Transport/Mobility Working Group have therefore agreed as part of this Statement of Common Ground that:
- The Project Newton Mobility Strategy and its target trip reduction based on geographical locations has been approved, including prioritising the maximisation of sustainable transport interventions, as agreed in the SoCG November 24th 2020;
 - There are in-principle design solutions and a phasing strategy for the delivery of physical mitigation schemes at the key junctions affected by the STP traffic as identified through the use of the MSDC strategic traffic modelling;
 - The designs of the physical mitigation schemes have been informed by individual Stage 1 Road Safety Audits, and Designer's Responses where appropriate to address any resultant safety concerns;
 - High-level construction cost estimates have been prepared for each of the physical mitigation schemes;
 - For the purposes of assessing the deliverability of the SA9 STP allocation, the traffic modelling is robust and the required mitigation can be achieved and delivered in line with the STP phasing, resulting in no severe traffic impacts;
 - In highways and accessibility terms, the SA9 allocation is sound.
- 3.2.2 The Transport/Mobility Working Group acknowledges that further modelling and design work will be required as part of the formal planning process for any forthcoming hybrid or outline application. All signatories agree to continue to work collaboratively on further work to support any planning application in addition to the allocation.

4.0 PROPOSED PHYSICAL MITIGATION SCHEMES AND PHASING

4.1 Physical Mitigation Measures Indicative Trigger Points Plan

4.1.1 The table below indicates the STP build-out phases at which the key junctions are expected to reach 100% capacity and require physical mitigation, derived from the MSDC strategic modelling traffic flows in each of the constituent scenarios.

4.1.2 The colour-coding is as follows:

< 85% capacity	85% - 100% capacity	100%+ capacity (trigger point)
--------------------------	----------------------------	---------------------------------------

For the A23-A2300 Hickstead southbound merge, amber indicates where the traffic flows exceed the theoretical capacity for non-motorway all-purpose roads of 1,600 vehicles per hour per lane.

		2023 reference (no STP)		Phase 1 2023		Phase 2 2025		Phase 3 2027		Phase 4 2029		Phase 5 Sites DPD 2031	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
A23-A2300 Hickstead													
West junction A2300 Improvement Scheme layout	Zero mode-shift												
	Target mode-shift												
East junction A2300 Improvement Scheme layout	Zero mode-shift												
	Target mode-shift												
A23-A2300 Hickstead southbound merge	Mainline vehicles per hour												
	Merging vehicles per hour												
	Downstream vehicles per hour												
A2300 - Cuckfield Road													
A2300 - Cuckfield Road roundabout (A2300 Improvement Scheme layout)	Zero mode-shift												
	Target mode-shift												
A2300 - Jane Murray Way roundabout													
A2300 - Jane Murray Way roundabout	Zero mode-shift												
	Target mode-shift												
A2300 - Northern Arc roundabout													
A2300 - Northern Arc roundabout	Zero mode-shift												
	Target mode-shift												
A272 - B2036 mini-roundabout Ansty													
A272 - B2036 mini-roundabout Ansty	Zero mode-shift												
	Target mode-shift												

4.2 Physical Mitigation Measures Indicative Phasing Plan

4.2.1 The table below sets out the details of the proposed physical mitigation schemes, along with the indicative phasing / trigger points, resultant degree of saturation in the 2031 Sites DPD scenario, and construction cost estimates.

4.2.2 The colour-coding is as follows:

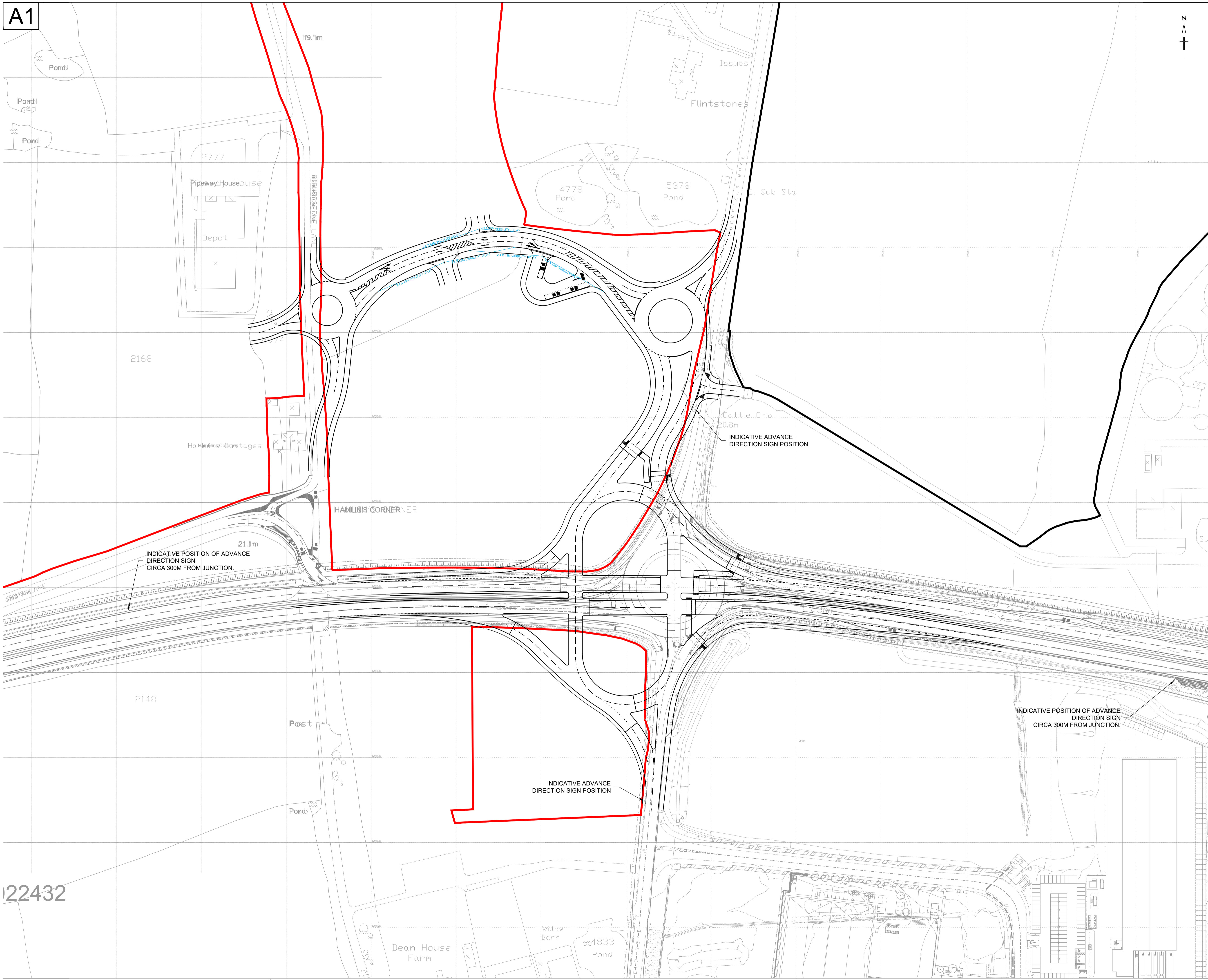
<i>< 85% capacity</i>	<i>85% - 100% capacity</i>	<i>100%+ capacity</i>
--------------------------	----------------------------	-----------------------

Junction	Phase / Trigger for mitigation (from Spring 2021 work)	Mitigation	Notes	Resultant Phase 5 2031 Sites DPD degree of saturation	Cost Estimate
A23-A2300 Hickstead west junction (as per A2300 Improvement Scheme)	At any point during build-out, in association with both Highways England and West Sussex County Council.	Adjustment to traffic signal cycle-times to accommodate traffic growth.	Increasing the signal cycle times allows the '2031 Sites DPD with physical mitigation' traffic scenario to be accommodated within theoretical capacity, but PM peak queues extend into the east junction.		Zero
A23-A2300 Hickstead west junction (as per A2300 Improvement Scheme)	Phase 3 2027 – the point at which westbound queues interact with the east junction.	Remove traffic signals and create a priority-controlled junction with priority given to westbound approaching traffic.	Pedestrian crossings on east and south arms retained as signal-controlled crossings		c.£200,000 + services/utilities diversion costs tbc
A23-A2300 Hickstead east junction (as per A2300 Improvement Scheme).	Phase 3 2027.	Partial signalisation of roundabout, designed by Connect Consultants <i>and to be agreed with WSCC and HE [pending RSA]</i>	Land within WSCC ownership – financial contributions for works on WSCC land as part of planning application.		c.£750,000 + services/utilities diversion costs tbc
A23 – A2300 Hickstead southbound merge.	Upgrade required in 2023 baseline PM peak prior to the addition of the Sites DPD traffic.	Upgrade merge/on slip layout designed by Connect and to be agreed with WSCC and HE.	Three options: Full lane-gain with compliant design, using third-party land; Lane-gain within existing highway boundary with departure from standard; Potential for a parallel-merge via CD122 Annex E, subject to further survey and design work.	N.A.	Lane gain construction cost c.£8 million - £10 million + cost of third-party land acquisition if required + services/utilities diversion costs tbc Parallel merge costs TBC

A2300 - Cuckfield Road.	End of Phase 1 2025.	Hamburger junction designed by Connect, required land is within WSCC and Project Newton ownership.	Enabling application or hybrid application to cover full details /ARM for access.		Hamburger c.£3m + services/utilities diversion costs tbc
A2300 – Northern Arc Western Link Road roundabout	Phase 2 (worst case) or Phase 3 (best case).	Increased lane flares on approach arms.	WSCC satisfied that the junction would operate successfully in the DPD Target scenario which incorporates the impact of the sustainable transport strategy on reducing the generated traffic flows.		c.£1.4m + services/utilities diversion costs tbc
A272 – B2036 mini-roundabout, Ansty	Existing capacity issues in baseline scenario.	Minor widening of A272 approaches, plus on-site measures to direct traffic to A2300.	Junction is over capacity in all assessment scenarios, even 2023 without the STP. Constrained site with limited ability to create significant increase in capacity. Proposed scheme delivers a reduction in the degree of saturation.		c.£112,000 + services/utilities diversion costs tbc

APPENDIX 1 – A2300 / Cuckfield Road ‘hamburger’ junction – revised design

A1



rev.	amendment	by	date

connect CONSULTANTS
 78 BROAD STREET, CHIPPING SODBURY, BRISTOL, BS37 6AG
 Tel: 01454 320 220 Fax: 01454 320 099
 Web: www.connect-consultants.com Email: bristol@connect-consultants.com



client
GLENBEIGH DEVELOPMENTS

project
**PROPOSED DEVELOPMENT
 GODDARDS GREEN SCIENCE PARK
 GODDARDS GREEN**

title
**PROPOSED SITE ACCESS
 ROUNDABOUT CUT-THROUGH SCHEME
 WITH LAND OWNERSHIP BOUNDARY**

scale
 1:1000

drawn by
 T.A.S

checked by
 T.B

date
 MAY 2021

status
 PRELIMINARY

drawing number
 18108 - 013

rev.

22432