

Subject Review of Gatwick Green Transport Modelling

Date June 2021

Job No/Ref 279019-10

1. Quantum of Gatwick Green Development

The quantum of development tested for Gatwick Green in the Crawley Transport Study is considered a low proportional use of the land identified in the Draft Crawley Borough Local Plan (32% of the minimum land area used as development area). It is noted that in the Local Plan's evidence base, the employment land assessment undertaken by Lichfields (both the Northern West Sussex Economic Growth Assessment and the subsequent Focussed Update for Crawley) apply a plot ratio of 40% (i.e. a one hectare site could accommodate a footprint of 4,000 sqm for industrial and storage or distribution uses) to reflect the pattern of development in Crawley. On this basis, we are concerned that the quantum tested in the Crawley Transport Study would lead to an optimistic assessment of the impacts of the land allocation.

The development quantum assessed is also a substantially lower development area than the Gatwick Green Transport Strategy anticipates the development could comprise (circa 29% of 265,000 sqm of development). Again, our concern is that an assessment of part of the land, part occupied by development, could lead to an optimistic assessment of the impacts of the land allocation.

The above is summarised in Table 1 below.

Table 1 – Quantum of Gatwick Green Development

Source	Policy / Assumptions	Quantum of development
Draft Crawley Borough Local Plan (2021) Submission Publication Consultation	Strategic Policy EC4 identifies “ <i>Gatwick Green as a Strategic Employment Location. The policy states a minimum of 24.1 hectares of new industrial land, predominately for B8 storage and distribution use, demonstrating through appropriate evidence the justification for any further industrial floorspace beyond this amount.</i> ” Paragraph 9.53 recognises that the Gatwick Green site is 47 hectares. The Gatwick Green land removed from Policy GAT2: Safeguarded Land for Second Runway exceeds 24.1 hectares and appears to be the full 47 hectares.	A minimum of 24.1 hectares
Gatwick Green Transport Strategy (2020) Draft Crawley Borough Local Plan, Consultation Statement Appendix 4b Wilky Group appendices	Paragraph 1.2.1: The Wilky Group proposes to bring forward an integrated mixed-use development and co-ordinated infrastructure solution to deliver the 47.3 ha (117 acre) site. Paragraph 1.2.2: “ <i>Whilst still at an early stage, it is anticipated that the development could comprise the following:</i> ” <ul style="list-style-type: none">• <i>Circa 160,000sqm GEA of B8 (Warehousing, distribution and logistics)</i>• <i>Circa 52,500sqm GEA of B1 (Office / employment use)</i>• <i>Circa 52,500sqm GEA of C1 (Hotel use)”</i>	47.3 hectares 265,000 sqm of development together with ancillary uses. Development area represents around 56% of the land.
Crawley Transport Study (2020/21)	Paragraph 4.2.1: “ <i>Development quanta assumptions provided by CBC were used for the Gatwick Green site. The Gatwick Green assumptions comprise 77,500 square metres (SQM) (GFA) split into:</i> ” <ul style="list-style-type: none">• <i>B8 Parcels Distribution (10%) or 7,750 SQM</i>• <i>B8 Commercial Warehousing (60%) or 46,500 SQM</i>• <i>B2 Industrial estate (30%) or 23,250 SQM”</i>	77,500 sqm of development Development area represents around 32% of the minimum allocated land (24.1 hectares), or 16% of the 47 hectares.

The implications are considered follows:

- On the above basis, it is suggested that the Transport Study assessment has considered a low proportional area of development on the identified land, which in turn would give an optimistic assessment of its impacts. The Local Plan employment land assessment uses a higher plot ratio of 40%.

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- As the land area is a minimum (24.1 hectares), within a much larger Gatwick Green site identified within EC4 (circa 47 hectares), only a small proportion of the likely development on the Gatwick Green is currently being assessed.
- Strategic Policy EC4 identifies “*Gatwick Green as a Strategic Employment Location. Proposals for development of the Strategic Employment Location will be required to provide as a minimum 24.1 hectares of new industrial land, predominately for B8 storage and distribution use, demonstrating through appropriate evidence the justification for any further industrial floorspace beyond this amount.*” This appears to confuse land area and floorspace. It is not clear at what additional floorspace amount the appropriate justification would be required as the only area given is a land area. If the tested floorspace, 77,500 sqm, is the limit this should be stated.
- We therefore have concerns as to whether the Transport Study is testing the full effects of the Draft Local Plan development local to Gatwick Airport, or whether the policy reflects the quantum of development considered.

2. Land Use and Traffic Generation

Strategic Policy EC4 identifies that proposals for development will be required to provide ‘*predominately for B8 storage and distribution use*’. Within the Crawley Transport Study, it is acknowledged within the study trip rates (see Table 2) that vehicle trip generation is sensitive to the proposed B8 uses, i.e. the B8 parcel distribution has much higher vehicle trip rates, around 10 times that of B8 warehousing. Therefore, the split assumed between these uses has great bearing on the overall vehicle generation and the assessment of the development impacts.

Table 2 – Crawley Transport Study trip rates

Development Type	Unit Rate	Origin-Rate (AM)	Destination Rate (AM)	Total Rate (AM)	Origin Rate (PM)	Destination Rate (PM)	Total Rate (PM)
B8, Parcel Distribution Centre	per 100sqm GFA	0.466	1.042	1.508	1.082	0.623	1.705
B8, Warehousing Commercial	per 100sqm GFA	0.049	0.121	0.170	0.076	0.017	0.093
B2, Industrial estate (02/D)	per 100sqm GFA	0.153	0.436	0.589	0.407	0.119	0.526

Extract from Table 3.1 of the Crawley Transport Study,

The assumption in the Crawley Transport Study for Gatwick Green is that the highest generating use, B8 parcel distribution, is a very small proportion of the overall floor space, at 10%. B8 warehousing, with the lowest trip rates, is assumed to occupy the greatest amount of floor space (60%). In total, 333 vehicle trips in the AM peak, and 298 vehicle trips in the PM peak are estimated for Gatwick Green on this basis. If however, an equal split was used between the two B8

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uses, the number of vehicle trips would have doubled in each peak hour to around 600 (noting that with a higher proportion of parcel and distribution this could increase further).

At this stage, if the split of B8 parcel distribution and B8 warehousing is neither restricted or known, it is a concern that the sensitivity of the split between these uses has not been tested, given the substantial difference in vehicle traffic generated.

We therefore have concerns as to whether the Crawley Transport Study is testing the full effects of the Draft Local Plan development local to Gatwick Airport, or whether the policy reflects the limitations in the development uses considered.

3. Lack of Highway Mitigation

As noted above, we have concerns as to whether the Transport Study is testing the full effects of the Draft Local Plan development local to Gatwick Airport, or whether the policy reflects the quantum of development considered.

Notwithstanding the assumptions above which could be significantly underestimating the Gatwick Green vehicle trips, the highway modelling work shows that a number of junctions will be overcapacity. This is both with and without sustainable travel mitigation measures.

For modelling scenario 2 with Gatwick Green, even with sustainable travel mitigation measures, six junctions are modelled as being overcapacity. This includes two junctions on A2011 Crawley Avenue to the south of Gatwick Green. For modelling scenario 3 with Gatwick Green and additional housing, further junctions are recorded as being overcapacity, including along Balcombe Road / Radford Road and along M23 Spur / A23 corridor. No specific highway mitigation measures are identified and a Manage and Monitor approach is proposed.

4. No Clear Allowance for Gatwick Airport Growth

The Crawley Transport Study includes an explanation of the committed and consented schemes included in the reference case and forecast models. The models also include an allowance for background growth using growth factors from NTEM / TEMPro. This growth is considered to take into account the committed and other planned growth of dwellings and jobs in the borough.

As noted in *Crawley Borough Local Plan Topic Paper 2: Gatwick Airport (2021)*, the growth of Gatwick Airport with a single runway, in terms of the number of flights and passengers, is not restricted by any extant planning permission. Gatwick Airport have set out their expectations for passenger and flight growth with the existing main runway in their 2019 Master Plan. It is not clear from the Crawley Transport Study whether any account of Gatwick Airport passenger growth with the existing runway has been accounted for in the assessment and therefore whether the Draft Local Plan highway impacts are fully understood.