

DEVELOPMENT MANAGEMENT

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Please ask for: Andrew Gregory
Our Ref: 19/02021/CONSUL

03 February 2020

Mr Craig Morrison
Development Management Team
Eastleigh Borough Council
Eastleigh House
Upper Market Street
Eastleigh SO50 9YN

Dear Mr Morrison,

Application No: F/19/86707

Site Address: Southampton International Airport

Description: Construction of a 164 metre runway extension at the northern end of the existing runway, associated blast screen to the north of the proposed runway extension, removal of existing bund and the reconfiguration and extension of existing long stay car parking to the east and west of Mitchell Way to provide an additional 600 spaces. (This application is subject to an Environmental Impact Assessment)

Thank you for your consultation on the above dated 02 December 2020 and for agreeing an extension until today for our formal response. This Council's Planning & Rights of Way Panel considered this application at its meeting on 25 January 2020.

Southampton City Council Position - OBJECTION

The proposed development to facilitate the growth of Southampton Airport would have significant adverse environmental and social impacts on Southampton and its citizens, particularly in respect of noise and, therefore, the City Council formally **objects** to this application and recommend that planning permission be refused.

The runway extension proposed will lead to a 'direct, long-term, adverse effect of major significance' to households, Bitterne Park School and businesses within the city of Southampton which cannot be fully mitigated through the scheme of mitigation measures offered, including the offer of acoustic insulation to households and other noise sensitive buildings subject to noise levels over 63dB LAeq.

Chapter 11: Noise and Vibration of the Environmental Statement (ES), supporting the planning application, indicates that 5,400 homes in Southampton are currently subject to adverse noise impact from the airport. This figure is forecasted to rise significantly based on the airport growth proposals with an additional 3,950 households in Southampton subject to adverse noise impact in the first year of airport expansion (2021) and a further 6,300 households by 2037. Furthermore 350/700 new households will be subject to a noise level defined in the planning application as having a significant observed adverse effect (SOEL) by years 2021 and 2037 respectfully.

Please note that this consultation response has been informed by an independent peer review of the applicant's noise impact assessment and the findings are appended to this letter (Peer Review by 24 Acoustics dated 05th January 2019).

The runway extension will facilitate operation of larger jet aircraft from the airport, many of which will take off in a southerly direction towards Southampton, over Bitterne Park and Townhill Park. This has the potential for residents and businesses within these parts of the city to experience additional noise from the operation of these larger jet aircraft.

The ES recognises this and states that 'the sensitivity of receptors, both households and the school [Bitterne Park School], is considered to be high, and the magnitude of impact, is considered to be high. Therefore, there is likely to be a direct, long-term, adverse effect of major significance prior to the implementation of mitigation measures. (See paragraph 11.6.14). The majority of the impacted premises are situated within the city of Southampton, within Bitterne Park and Townhill Park.

The applicant seeks to mitigate this noise impact by providing financial assistance for sound insulation to the occupiers of impacted premises. However, this will not fully mitigate the impact of the additional noise, for example on domestic gardens or school play areas. The limitations of sound insulation cannot be overstated. Acoustic insulation would only benefit internal areas at receptors providing residents keep windows closed (which may lead to ventilation and overheating issues). It will not be possible to mitigate against the noise impact to external amenity areas.

Southampton City Council is also concerned that the following shortcomings of the noise assessment and proposed scheme of mitigation may have underestimated the significance and extent of the noise impact on Southampton and its citizens:

- The worst case scenario in terms of air transport movements (ATMs) has not been assessed, calculating the maximum number of passengers that could pass through the current terminal, the fleet mix and the contours that would be generated.
- Modelling has not been sensitivity tested to take into account the introduction of new generation aircraft (such as the Airbus NEOs and the Boeing MAX), but also considering other factors that may alter the performance of these aircraft.
- The ES states that this split was 76/24 in 2016 (meaning that the majority of departures occurred over Southampton and approaches over Eastleigh). For reasons which have not been justified, a split of 64/36 has been used for the future scenarios. This will have the effect of underestimating the noise impact over Southampton and should be clarified by the Airport/ WSP;
- No details have been provided showing the number of events exceeding (for example) 65 and 70 dB LAMax,s (N65 and N70 noise contours).
- WSP's determination of the noise levels that relate to LOAEL and SOAEL for aircraft movements are higher than the levels reported in the AECOM/ Defra publication. In addition, the Airport's NAP defines a lower level for LOAEL. As a result it is our opinion that the ES has significantly under-estimated the full extent of the likely noise impact.
- It is considered that the Airport's Noise Preferred Routes, whilst potentially suitable for the existing operations, may not go far enough for the new proposals. It is unclear whether the Airport have considered new noise abatement procedures/ routes to reduce the number of households affected by the proposals.

- The limitations of sound insulation cannot be over-stated. The insulation would only benefit internal areas at receptors providing residents keep windows closed (which may lead to ventilation and overheating issues). They will clearly be of no benefit to external amenity areas. Furthermore it is unclear how the proposed scheme of acoustic mitigation would be delivered to affected households in practice, to ensure that acceptable internal ambient noise limits are met in accordance with British Standards (BS8233). The delivery of improved building acoustic performance through improved building fabric and glazing specification may be costly to ensure full compliance with BS8233. It is noted from the Peer Review by Acoustics 24 that Bristol Airport offers a grant of £7,500 to residents in/above the 63dB contour and £3,750 for residents in the 57 and 60dB contours. Gatwick Airport offers £3000 towards double glazing for households within the 60dB contour. Heathrow offer the full costs of insulation for residents in the 60dB contour.

The development proposal is therefore considered contrary to paragraphs 8 and 180 of the National Planning Policy Framework (2019), 3.12 of the Aviation Policy Framework (2013), 5.67-5.68 of the Airports National Policy Statement: new runway capacity and infrastructure at airports in the South East of England (2018), 2.23 of the Noise Policy Statement for England (2010).

In addition to the substantive objection it is considered that the application is also suffering from a lack of information in the following areas:

1. Traffic and transportation: –

The application states that the proposals would facilitate an increase of passengers using the airport from 2 million passengers per annum (mppa) to 3mppa and the Solent Sub-Regional Transport Model (SRTM) has been utilised to determine the level of trip generation that would result from such an increase. However, this estimated trip generation has not been corroborated with existing data and as such this is required before the impact of the increased passenger numbers can be fully assessed.

Furthermore the impact of the 600 space car park has not been considered within the Transport Assessment. This significant increase in parking spaces at the airport will have an impact on travel behaviour which hasn't been addressed within the assessment. In particular the justification for using the SRTM 'DS3' scenario uses the modal split reported from a 2018 travel survey as a key element in determining that the modelled 2.66mppa in the SRTM is comparable to the 3mppa projected increase. Should travel behaviour to and from the airport change as a result of the car park then these assumptions may not be correct.

Other assumptions have been made in determining that the SRTM DS3 scenario includes traffic associated with 3mppa that require additional justification or clarification in order for this be used as a basis for assessment, including:

- It is not clear how the modal split data has been used to revise the mppa covered by the SRTM traffic flows. It is noted that the surveyed modal split shows a higher public transport share than the SRTM assumptions however the assessment then goes on to retain the total mppa using highway trips whilst using the surveyed modal split proportion to add additional mppa using public transport. The reasoning behind this is not set out.
- The assessment notes that the SRTM does not determine which trips are two-way (for example someone dropping off a passenger by car so arrives and departs within an hour) and which are one way (a passenger parking at the airport) which could underestimate the number of passengers per trip and to address this a 50/50 split in

the taxi mode share between two-way trips and one way trips has been assumed. This is on the basis that all 'off site' taxis (i.e. not airport based) would be one way trips however it is not clear what this is based upon, for example is it assumed that all taxis drop off one fare and then wait at the airport to pick up another fare?

- Finally the assessment then considers vehicle occupancy rates between when the SRTM was constructed and now which show a 16% increase in occupancy. It would be useful to show vehicle occupancy rates for other years if available in order to understand if this is part of a trend for an increase in vehicle occupancy at the airport or whether one or both figures are anomalous and therefore whether using the 16% figure is appropriate. In addition more information on the surveys (and the 2018 survey on which the modal split data is based) is required, for example were the vehicle occupancy surveys undertaken at the same times of year (as occupancy rates could be higher during school holidays) and how the data was collected.

The majority of the junctions assessed are in Hampshire or affect the M27, and we would expect Hampshire County Council and Highways England to comment on these. Whilst the A27/Wide Lane and the Wide Lane/A335/Wessex Lane/Stoneham Way junctions in Southampton have been modelled as requested there is no current year baseline in order for the models to be validated. As such turning count data and queue length surveys are required and a current year baseline model should be provided to demonstrate that the model is predicting the impact of future traffic growth and the proposals accurately. In addition the model for the A27/Wide Lane junction should be reviewed. Whilst it is acknowledged that the junction could be impacted upon by the operation of the Wide Lane/A335/Wessex Lane/Stoneham Way junction, the LinSig model as it stands does not seem to accurately model the roundabout junction, particularly underestimating queuing on the Mansbridge Road in the AM peak.

Insufficient information has been provided on sustainable travel modes – walking, cycling, bus and rail – given the proximity of the Airport to Southampton Airport Parkway station which has frequent connections to Southampton Central Station. Likewise, there is little on staff journeys to work who may be coming from Southampton to work at the Airport – this can be covered within a staff travel plan but commitments of action/delivery plans should be considered to further reduce the need for private car travel.

It is noted that the Transport Assessment includes a commitment to prepare a Travel Plan however the application should be supported by a document setting out the targets for sustainable travel mode share and how the current mode share can be improved upon.

It is also noted that the runway extension will allow sufficient aircraft movements to accommodate 5mppa. However due to the size of the current buildings, only 3mppa can be accommodated and therefore impact from only 3mppa have been assessed. There is little information on why this is and whether flight schedules or management can affect how many passengers can be accommodated by the current buildings.

2. Climate change:-

The application fails to clarify how future potential changes in Government policy on climate change and the reduction in greenhouse gas emissions could be taken on board as part of the airport's growth, especially given the recommendations of the Committee on Climate Change (CCC) to the Government in Lord Deben's letter of 25 Sept 2019. The proposal has not been sensitivity tested against the 25% growth cap as recommended by the CCC. A fuller assessment of how the current proposal accords with paragraphs 38 and 117 of the NPPF is required. Furthermore since the ES is based on assumptions about reduction in aircraft emissions from new generation aircraft, the growth in ATMs should be

limited/connected to the provision of the new generation aircraft so that improvements in air quality that have been relied upon in the ES can be achieved.

3. Air Quality:-

Southampton City Council's Scientific Service has considered the document 'Environmental Statement (ES) Chapter 7 Air Quality' submitted for Southampton International Airport, Eastleigh (19/020/21/CONSUL) prepared by WSP in 2019. We note the report concludes that the modelled pollutant concentrations within Southampton City Council's boundaries are not likely to threaten our ability to maintain compliance with statutory air quality standards or our ability to sustain an ongoing general improvement in Southampton's air quality. However, we have several concerns regarding the methodology applied, assumptions used and have noted several inconsistencies. These are listed below:

- Para 7.3.16. It is unclear if construction traffic data is in the format of annual average daily flows or another averaging time.
- Para 7.5.6. The potential dust emission magnitude from track-out, based on the numbers of vehicles likely to be accessing the site per day (less than 50 HGVs but potentially more than 10 on any given day), is estimated to be medium. However, this section states more than 100m of unpaved/unconsolidated road could be in use. According to IAQM Guidance, this would make the magnitude large.
- Para 7.3.24. The reported method claims that the assessment has used a 'theoretical worst-case scenario' by applying current aircraft emissions across all years – assuming no improvement in future year aircraft emission rates. It is unclear on what basis current emissions of oxides of nitrogen have been assumed to be lower than newer aero-engines. Additional evidence should be provided to justify the assertion of a worst-case scenario and that there is not a risk that newer aero-engines might generate greater emissions.
- Appendix 7.2. The relationship between monitored and modelled road contribution to NO_x clearly demonstrated that the model was performing differently in certain locations. As such the model verification done using 2 zones, one with a factor of 3.052 and one with a factor of 2.21. The ES appendix should clearly outline the reasons for the differences in model performance in the two areas.
- Para 7.3.48/49 states that motorways and A-Roads have been sector removed but not the contribution from the airport. Section 7.4.17 states the airport and road contributions have been removed which is a contradiction.
- Para 7.4.21 states 'For future years, deposition levels have been reduced by 2% per annum from the APIS mapped data for the 3 year average between 2015 – 2017. This is contrary to the IAQM guidance document, 'A guide to the assessment of air quality impacts on designated nature conservation sites' (version 1.0) . which suggests that an alternative approach is to assume no change in future baseline concentrations or deposition rates, where there is no evidence to indicate that they may decrease in value. If the DMRB methodology is used, it is recommended that evidence of the decreasing trends in nitrogen deposition is provided.
- Para 7.3.44. No information is provided on hourly or daily profiles of future aircraft movements. However, it should have been a relatively simple matter to make assumptions based on professional experience to distribute the annual average LTOs within the airports permitted operating restrictions. By not doing this, it is considered that the following limitations are introduced into the assessment:
- The combined impacts from energy plant, airside activities and landside road traffic are not reported at any sensitive receptor.
- The annual mean concentrations reported are not based on emissions being modelled under the combination of meteorological conditions likely to be experienced at the time the activities are most likely to occur.
- Appendix 7.1 Includes emission rate data sourced from the appropriate databases. Clarification should be provided that all values (including those for the E195) are

reported on a per engine basis as stated or on a per plane basis as this is not clear in the document.

- Figure A7.1.1 illustrates meteorological conditions for Southampton airport in 2018. There is no evidence provided that 2018 was a typical year.
- Appendix 7.3. fNO₂(AIR) values are reported as being based on national data published by the UK government for the fraction of oxide of nitrogen emitted in the form of nitrogen dioxide and not based on data for the subset of the data that represents the specific fleet modelled. More detailed justification of why the data used is representative should be provided.
- Table A7.3.1. Reports The fNO₂ factors as a single emission weighted average factor. But there is an opportunity to refer to nitrogen dioxide emissions that are specific to the airport conditions, for example length of taxi-ways, actual usage of plant. The dispersion modelling has modelled the dispersion from the actual sources separately to take account of the distance from each source to each receptor and the associated dilution on an hour by hour basis. However, this detail is then lost by applying a single weighted emission factor. More detail should be provided to demonstrate that the approach used does not result in under representing nitrogen dioxide concentrations at receptors nearest to the airport.

4. Trees and Ecology/Biodiversity:-

It is unclear whether the extension to the runway will change the aerodrome reference code which may alter the obstacle limitation surfaces around Southampton. Any change to the current obstacle limitation surfaces may increase the geographical area on the ground which in turn will increase the amount of tree work expected for the take off and approach of aircraft. Historically, there has been work undertaken to trees within Southampton in relation to the flight surfaces, such as can be seen around Stoneham Cemetery and Frogs Copse. More recently there is a focus Marlhill Copse in relation to aviation. Any further increase in tree related work will have a negative impact to the local amenity and result in lower carbon sequestration.

A number of Sites of Importance for Nature Conservation (SINC) located within Southampton, which lie within the Zone of Influence, have not been considered in the ecological assessment, these sites are as follows:

- Marlhill Copse SINC
- Frogs Copse
- Frogs Copse Meadow
- Land south of Monks Path
- Riverside Park

These sites lie under the flightpath and will be subject to higher levels of noise and emissions the impacts of which have not been assessed. In addition, Frogs Copse and Frogs Copse Meadow SINC's have already experienced impacts as a consequence of tree removal to safeguard protected airspace and Marlhill Copse SINC is also likely to be affected. Removal of substantial trees will have adverse impacts on ecological value of these sites however, the ecology reports makes no mention of whether larger planes will necessitate additional tree removal and the likely ecological consequences.

Furthermore it is not possible to predict guaranteed reductions in emissions, and it is unclear what measures will be put in place to prevent adverse air quality impacts if nitrogen emissions do not decline as predicted. In addition, the conclusion in paragraph 9.6.72 of the ecology assessment that deposition of nitrogen onto mudflats won't lead to significant adverse effects due to tidal inundation does not appear to be appropriate. The nitrogen in question will be added to a system that is already experiencing adverse impacts as a consequence of excess nitrogen levels. Any further additions will likely exacerbate the problem and should therefore be considered as an in-combination impact.

5. Economic benefits:-

The forecasted uplift in economic growth in the years 2019-2021 is queried. The main point is that a £100m uplift in the value of services over such a short period of time and is contingent on the delivery of the wider masterplan which, we assume is also, contingent on an additional application to expand the terminal and new transport investment.

However if, following receipt of this objection, Eastleigh Borough Council are minded to approve the application, you are encouraged to secure the following controls through planning conditions or S106 obligations, in addition to the control measures and mitigation already offered within the planning application submission:

- Noise monitoring system.
- The introduction of enforceable noise envelopes and monitoring.
- Public Noise Complaints Handling Service.
- Sound Insulation Grants Scheme.
- Night noise provisions.
- Aircraft restrictions to restrict size and movement of aircrafts to include a maximum number of ATMs with 10% buffer. This should include a penalty if the number of ATMs is exceeded by reducing the quota by the same amount the following year. This control measure can be used to limit both noise impact and also greenhouse gases having regard to the advice of the CCC which recommends a growth cap of 25%.
- Aircraft restrictions to tie the growth of the number of movements to the introduction of new generation aircraft (such as the A320NEO or Boeing 737MAX) to ensure the benefits of reductions in noise and emissions identified in the ES are achieved.
- Introduction of a Quota Count system, used at other airports (such as the designated airports [Heathrow, Gatwick and Stansted], London City and Luton) to seek to encourage the use of quieter aircraft.
- Total per annum passenger restriction.
- Controls on shouldering to prevent excessive concentrations of ATMs taking off/landing when the airport first opens during morning hours at 6am Mon-Sat and 7.30am on Sundays.
- Travel Plan.
- Replacement tree planting and ecology mitigation.

The City Council would wish to work proactively with Eastleigh Borough Council as it develops planning controls whether through planning conditions or Section 106 Agreements such that its residents and business are mitigated against this impact of this proposed development.

Please also find enclosed the redacted public comments received by Southampton City Council in relation to this consultation response (84 representations received), including an objection from the Leader of the Council, Councillor Hammond, on behalf of the Labour administration.

Yours sincerely,



Paul Barton
Interim Head of Planning & Economic Development

Enc.

Peer Review by Acoustics 24 dated 5 January 2020

Letter from the Leader of the Council, Councillor Hammond dated 23 January 2020

Redacted public comments