Woldingham Parish Council (approved 09 April 2017)
Response to the Supplementary Consultation

Woldingham Parish Council wish to OBJECT to the revised IAP proposal with the following comments (unless noted reference is to Feb 2017 consultation document):

- Consultation Nov 2015 "there is potential for a significant reduction in the number of instrument approaches made to Runway 21 which will be to the immediate benefit for residents of Farnborough, Crofton and Petts Wood". 5.7.1 estimated as 30% reduction in instrument approaches to Runway 21. *This is an immediate increase by 30% to numbers of aircraft over Woldingham and other conurbations on the runway 03 approach.*

- In addition to this 3.5 "the objective of runway 03 IAP is to keep arriving aircraft as high as possible for as long as possible". However in order to resolve procedure interactions with Gatwick your proposal for arriving aircraft would "descend on the LBHA IAP earlier than originally intended".

- Furthermore 4.3 a "requirement to not be above 2400ft at ARR04 has been added"

- At the same time, and most relevant to Woldingham, "KB031 has been repositioned 1.75 NM north of its previous proposed position", aligning it North of the M25 and along The Ridge in Woldingham.

- Per Chart C the flight path between KB031 and KB03F will descend from 2000ft to 1600ft. The elevated terrain (North Downs) which Woldingham sits on at the point of The Ridge/Botley Hill intersection is 875ft.

- This gives only 725ft clearance between Woldingham and aircraft

- Per the Nov 2015 consultation, 5.6 Fuel burn, one argument in favour of the first proposed Runway 03 approach (route South of M25) was 5.6.1 "the new procedure will be conducted at a higher altitude (3000ft amsl)... as compared to the Circling Approach procedure which is conducted at low altitude (851ft aal)...turbine engine efficiency improves markedly with increase altitude and even the difference between 3000ft amsl and 851ft aal is appreciable and significant'. With the movement of KB031 and KB03F to the higher terrain of Woldingham any fuel burn advantage at higher altitude is lost.

- Additionally data on fuel burn is deliberately misleading between Nov 2015 and Feb 2017 consultations; one shown in Lb the other in Kg and using different aircraft examples. It is impossible to establish any correlation between the two sets of data quoted nor to draw any conclusion. The lack of transparency could be interpreted as a desire to hide unfavourable fuel burn data for the revised Runway 03 route.

- In the Nov 2015 consultation you were unable to provide CO2 emissions data but in favour of the increased altitude of the route south of the M25 you stated Government Guidance "due to the effect of mixing and dispersion emissions from aircraft above 1000ft are unlikely to have a significant effect on local air quality. There are no changes (to flight path) affecting flight paths below 1000ft which are contained within circa 3NM of LBHA." It is not clear if 1000ft refers to amsl or aal however aal is the only logical interpretation when considering the effects of pollution on populations beneath flight paths. On the revised route

Woldingham sits 725ft below the Runway 03 flight path; below the 1000ft guidance and therefore presumably exposed to a LIKELY significant effect on air quality.

- 8.6 "the revision of the proposed IAP results in a marginal increase in the size of the 80dB SEL contour and the population encompassed. This is due to the higher terrain elevation beneath the adjusted flight path where it turns to intercept the final approach track"

The revised Runway 03 approach brings flight paths over higher terrain which, according to your own original consultation document, increases noise, fuel burn and air quality.

- Additionally in the Nov 2017 consultation a table of CO2 emissions has been included (Table 8) which clearly shows for the revised Runway 03 approach for all aircraft models that KgCO2eq is significantly bigger (2-5 fold) than the existing Runway 21 approach AND bigger for all aircraft than any Circling Approach.
Every cut of the data you have provided evidences that CO2 levels are higher on the longer and higher terrain revised Runway 03 approach – in some cases up to 5 times higher than the same aircraft on the existing routes.

- Finally 2.7 "as a consequence the IAP, it has been necessary to alter the categorisation of the IAP to an Area Navigation Non-Precision Approach. The revised procedure configuration does not meet the full procedure design requirements for a Precision Approach."
The revised approach does not meet your objectives.

Woldingham Parish Council Conclusion:

- the revised Runway 03 approach will increase air traffic over Woldingham by 30%
- The revised proposal does not meet the objective of Runway 03 of keeping aircraft higher for longer.
- this is exacerbated by the elevated terrain of Woldingham between KB031 and KB03F
- the clearance between Woldingham (875ft) and aircraft (1600ft) falls below the International Standard minimum flight height above the highest fixed object of 1000ft adopted by the CAA (note this was a height reduction in the UK from 1500ft).
- Fuel burn at low altitude (851ft aal) is less efficient than high altitude (3000ft amsl). The revised Runway 03 route reintroduces the need to fly at low altitudes over Woldingham (725aal) making fuel burn inefficient
- whichever way considered CO2 emissions are significantly greater on the revised Runway 03 approach than the existing Runway 21 approach
- the revised proposal has a greater 80dB SEL contour based on population and area because of the higher terrain elevation.
- The revised proposal does not enable Biggin Hill to deliver an Area Navigation Precision Approach.

In Summary:

The revised approach is not fit for purpose.
The fact that the revised Runway 03 approach is significantly worse for the environment than the existing approaches (Runway 21 and circling) should cause everyone to consider the appropriateness of this proposal in the context of heightened corporate responsibility and sustainability. In this day and age with corporate and political focus on sustainability and

reducing CO2 emissions it is staggering that a proposal which would result in increased CO2 emissions is even on the table to be considered.
Runway 03 IAP approach should scrapped or at best be re-routed along or South of the M25 away from elevated ground for the benefit of CO2 emissions, public air quality, noise reduction and overall environmental impact.