SCDC Planning Reference S/3440/18/OL

Bourn Parish Council Response to outline planning permission for a new mixed-use village comprising residential development of approximately 3,500 dwellings.

Bourn Parish Council (together with the Coalition of Parish Councils), has consistently objected to the development of Bourn Airfield because of the likely impact on increased traffic flows and safety in neighbouring villages, especially during the morning rush, when children are walking to school.

The Local Plan planning inspectors approved Bourn Airfield for inclusion in the Local Plan because they considered that provision of a HPQT (the C-2-C Busway) would ensure a significant modal shift from car to bus, thus reducing traffic flows through local communities.

In our view, the traffic assessment presented by the applicant is inadequate because it:

- underestimates the traffic that will be generated by the new development;
- does not show how the required modal shift and consequent reduction in traffic flows through villages would be achieved;
- makes assumptions on traffic flows through villages, which are unrealistic and contradict the currently reported traffic pattern.

1. The estimates of peak morning traffic flows are underestimated

The applicant estimates that the peak hour flow in the morning from the development will be 957 vehicles. Other information collected by, or available, to the applicant gives a significantly higher figure. TSP traffic data from November 2017 indicated that 1,297 cars left Cambourne at the dumb-bell in the peak flow hour that, assuming another 150 cars left from the south, gives a total of 1,447 cars (the equivalent of 1,191 cars from Bourn[1] Airfield – 25% higher than the figure the applicant decided to use).

Recommendation 1: The applicant should be asked to explain why it used the lower figure and should be asked to carry out sensitivity analyses to check if the local highway network (junctions, roundabouts) would have sufficient capacity for the higher flow indicated by the TSP data.

2. Inadequate analysis of the impact of modal shift to bus on traffic flows.

The TRICS data indicates that currently only 153 people leave Cambourne between 0700 and 1000 by bus while 3,381 travel by car. The applicant refers to its Beaulieu (Chelmsford) development where they achieved a modal shift of 25%. Such a modal shift at Cambourne would be the equivalent of 883 people leaving each morning from 0700-1000 (727 for Bourn airfield – 3500 v 4250 houses).

[1] *3,500 houses at Bourn v 4,250 at Cambourne.*

We acknowledge that were this level of modal shift to be achieved it would significantly reduce the number of cars leaving the new development. Unfortunately, the applicant does not indicate how this level of modal shift would be achieved in Bourn Airfield. More concerning still is the fact that such a large modal shift appears to be in conflict with the Greater Cambridgeshire Partnership C2C busway Network Scheme.

Recommendation 2: The consultant should revise its analysis of modal shift from car to bus and explain how this will be achieved.

3. Unrealistic directions of flow assumed on the local road network

The assumed directions of traffic flow from the development differ significantly from those currently from Cambourne, leading to an underestimation of traffic flows through nearby villages, including Hardwick and Knapwell. Some significant omissions (in the case of Knapwell) and underestimations (in the case of the likely impact of eastbound traffic into Hardwick) call in to question the thoroughness of the applicant's Traffic Assessment.

Recommendation 3: The applicant should be asked to review and revise the assumed traffic flows affecting the surrounding villages.

4. Uncertainty about the C-2-C HQPT

In addition, there is considerable uncertainty about the timing and delivery of the High Quality Public Transport (HQPT) system considered essential to the development by the Local Plan Inspectors in their report (August 2018).

On 17/2/20 the Cambridge Independent reported that the Mayor of the Combined Authority James Palmer called for the Cambourne to Cambridge busway scheme, as it stands, to be immediately halted because (i) it does not fit in with the Combined Authority's plans for the Cambridgeshire Autonomous Metro and (ii) strong local opposition to the scheme and suspicions about the objectivity of the analysis by the GCP and its consultants.

We recommend that the application for outline planning permission is REFUSED until the recommendations 1-3, above have been achieved and there is clarity on the timing and delivery of an adequate C-2-C HQPT.

Background of concern regarding traffic generation, modal shift targets and consequent sustainability of a new settlement of approximately 3500 houses on Bourn Airfield

The government inspectors, Laura Graham and Alan Wood, wrote to the planning authority on the 20th May 2015 expressing concerns over the soundness of the Draft Local Plan, in effect suspending the plan until SCDC had addressed a range of shortcomings including,

'.... the ways in which infrastructure requirements will be met are still at a very early stage of consideration. For example, at the hearing into Matter 7 it was suggested that the segregated bus link to serve proposed development at Bourn Airfield (policy SS6) may be pursued via an off-line route, but little work has yet been done on the feasibility of, or options for, such a scheme. The likely difficulties of land assembly, apart from any other considerations, could well have significant implications for cost and timing which are as yet unknown. '

Inspectors' letter to South Cambridgeshire District Council Planning Department 20th May 2015

More than three years later, when the inspectors finally reported on the Local Plan, prospects for the delivery of a HQPT route had slightly improved but were by no means resolved.

'At the time this matter was considered at the examination, a certain amount of work had been undertaken investigating options for what is known as the Cambourne to Cambridge Better Bus Journeys project, but no clear route alignment had been confirmed. It is fair to say that the scheme is still at an early phase of development, but the City Deal Executive Board allocated £59 million towards the eastern section of the scheme in January 2015, and we consider that there is a reasonable prospect that the scheme will be completed during the Plan period.

Report on the Examination of the South Cambridgeshire Local Plan August 2018

Since then the City Deal, in the face of a barrage of criticism regarding the Cambourne to Cambridge Better Bus Journeys project, transformed into the Greater Cambridge Partnership, and with a supposedly revitalised project team, sought to conclude the consultations and determine the final route. As of 19th of February 2020 no final and conclusive route announcement has been made and the process has again been suspended by James Palmer, the Major of the Combined Authority.

'The Cambridgeshire and Peterborough Combined Authority has taken control of public transport improvements in the Cambourne to Cambridge area, it has been announced today. Mayor James Palmer made the announcement in response to "significant concerns" raised by residents. He has called for the Greater Cambridge Partnership's Cambourne to Cambridge busway scheme as it stands to be "immediately halted". Mr Palmer has told the GCP that the schemes proposals do not fit with the Combined Authority's aims for the Cambridgeshire Autonomous Metro.'

Cambridge Independent, Monday February 17th 2020

It is clear from the Local Plan Inspectors' Report that the delivery of a HQPT system serving the new settlements along the A428 corridor played a significant part in helping to convince them that a new settlement at Bourn Airfield might be sustainable.

'The Transport Strategy for Cambridge and South Cambridgeshire (TSCSC) recognises that the A428/A1303 corridor is subject to congestion and proposes a high quality public transport route to serve the Bourn Airfield and Cambourne West proposals. Policy SS/6 recognises the need for on and offsite infrastructure provision to mitigate the impact of the development on the highway network.'

South Cambridgeshire District Council Local Plan, Inspectors/ Report August 2018

However, cautious that what was promised may not materialise, the inspectors made provision for an early review of the Local Plan in their Report.

'The review of the Plan (see issue 17 below) offers an opportunity for the proposal to be reviewed in the light of the further work that will have been completed at that time.'

Issue 17 – Should a commitment to a review of the Plan, within an agreed period, be included in the Plan?

Conclusion

"In the light of the concerns identified in our report, we conclude that it is necessary to include a commitment to an early review of the Plan, and that the policy included in SC41 is an appropriate way to achieve that without prejudging what the content of the joint Local Plan or its evidence base should address.'

South Cambridgeshire District Council Local Plan, Inspector's Report August 2018

The squabble and uncertainty surrounding what HQPT should be delivered on the A428 corridor is surely just the kind of concern that the inspectors had in mind when they made provision for an early plan review. At the very least the uncertainty around the deliverability of the A428 HQPT route should result in either a refusal of the outline planning application for Bourn Airfield, or a suspension of the application pending real progress on a timetable for the delivery of the HQPT system.

Prospects for sustainability. What modal shift can we expect based on the suspended GCP Cambourne to Cambridge Busway

If the District and County Officers and Planning Committee members are minded to ignore our arguments for refusal, or suspension, based on the considerable uncertainty around delivery of the A428 HQPT then we would like to proceed to a review of Countryside Properties' aspirations for achieving a significant modal shift away from private cars to more sustainable modes of transport outlined in their Amended Transport Assessment for the Bourn Airfield Development dated December 2019. For the purposes of this review we shall proceed on the

basis that the C2C busway will go ahead in spite of the suspension by the Combined Authority Mayor and the EastWest Rail Company's decision to route the Oxford to Cambridge rail line via Cambourne with the potential to supersede any busway plans.

The Transport Assessment for Cambridge and South Cambridgeshire (TSCSC) adopted in March 2014 is clear in what it requires of new developments.

"New development will be required to make provision for integrated and improved transport infrastructure to ensure that most people have the ability to travel by foot, bicycle or by passenger transport and in line with specified modal split targets where relevant.

The Transport Assessment for Cambridge and South Cambridgeshire (TSCSC Policy TSCSC 7 Supporting Sustainable Growth)

The Local Plan Inspectors also recognised the need to mitigate the impact of the Bourn Airfield and West Cambourne developments.

'The Transport Strategy for Cambridge and South Cambridgeshire (TSCSC) recognises that the A428/A1303 corridor is subject to congestion and proposes a high quality public transport route to serve the Bourn Airfield and Cambourne West proposals. Policy SS/6 recognises the need for on and offsite infrastructure provision to mitigate the impact of the development on the highway network.'

Paragraph 83 of The Local Plan Inspectors' Report on the Local Plan Examination, August 2018

It's clear from the above that a central pillar to the argument justifying these new settlements as legitimate sites for development was the ability to deliver a HQPT system capable of realising a significant modal shift away from private cars. Recognising the importance of a HQPT route to the sustainability of their development, the applicant's Transport Assessment is quick to point out that,

'The strategic bus and cycleway infrastructure which is being implemented through the Greater Cambridge Partnership, will have a major beneficial effect on vehicle trips on the relevant corridor as tested by CCC in their Strategic Transport Modelling.'

Paragraph 10.8 of Countryside Properties UK Limited Transport Assessment

We will now attempt to quantify the so-called 'major beneficial effect' on vehicle trips that might be achieved with the Cambourne to Cambridge busway as it is currently conceived. We feel that a realistic assessment of the likely modal shift away from private cars - in particular for daily commuting – is essential in order to establish the sustainable nature of the Bourn Airfield new development.

Commuting by bus from Cambourne (the only comparable data currently available to us) is consistently very low. Recent TRICS data from the summer of 2018 recorded a figure of only 153 bus passengers departing Cambourne between 0700 and 1000 (53 between 0700 and

0800, 74 between 0800 and 0900 and 26 between 0900am and 10.00). A dedicated off-road bus route will inevitably increase passenger numbers but with the same TRICS data recording that a total of 3,534 people left Cambourne in the same 0700 to 1000 period, it is clear that a HQPT system will have to deliver a very significant increase in passenger numbers to have any real impact on private car use.

Countryside Properties' Transport Assessment helpfully provides an example of the what they refer to as 'a successful implementation of measures designed to encourage trips on foot, by bicycle and by bus'. Their Transport Assessment informs us that current monitoring at their Beaulieu development, near Chelmsford, shows around 25% of residents travel by bus. They add that this figure is well in excess of the modal share for the surrounding area.

If we anticipate the same level of modal shift for the new busway, then the Cambourne to Cambridge busway would transport 883 passengers over the 3 hours between 0700 and 1000 (883 being 25% of the 3,534 commuters the TRICS data tells us that depart Cambourne during these hours). Based on a capacity of 60 passenger per bus that would require about 15 buses over three hours or 5 buses and hour (a bus every 12 minutes). That seems reasonable. However, the figure of 883 passengers leaving Cambourne does not include any passenger from Cambourne West (pro rata an extra 467 passengers), or from Bourn Airfield (pro rata an extra 727passengers). So, assuming 25% of commuters from the three sites - Cambourne West, Cambourne and Bourn Airfield - travel by bus, then the total number of bus passengers would be 2,077. Servicing that number of passengers would need 11 buses an hour, or an empty bus leaving Cambourne West approximately every 5.5 minutes between 0700 and 1000.

The diagram above illustrates that the Greater Cambridge Partnership's own Bus Strategy falls far short of delivering that level of service.

The GCPs proposed bus network features:

• 2 buses per hour between Cambourne and Cambridge City centre

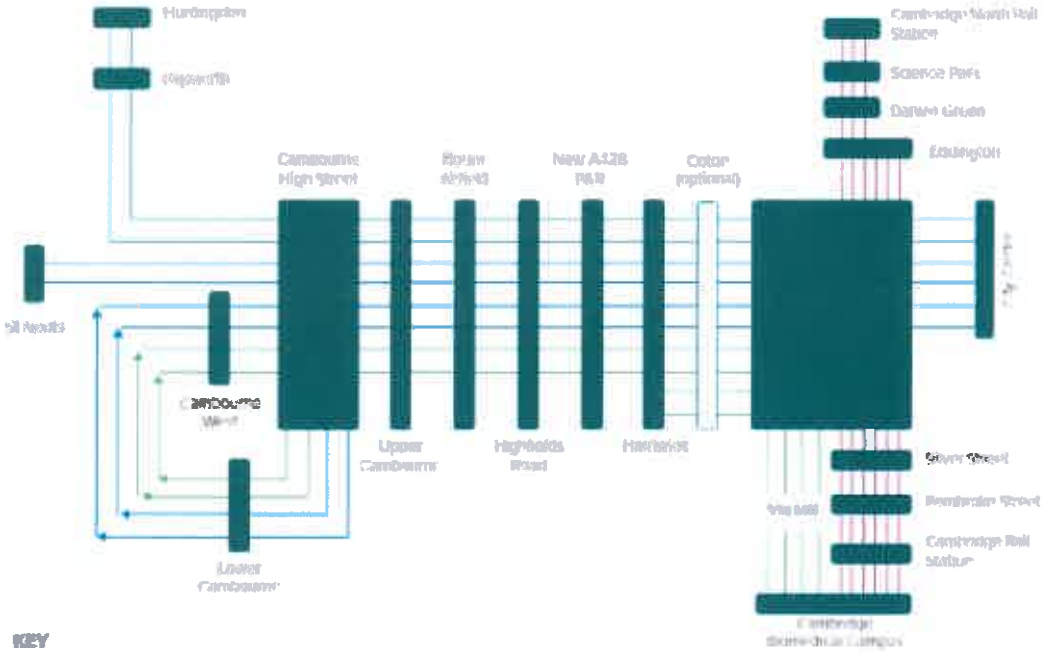
2 further buses would run between Cambourne and the Biomedical campus

• 2 more buses per hour between Huntingdon and Cambridge City centre (with a stop at Papworth)

• 2 more buses an hour would run between St Neots and Cambridge City centre.

9.5 The proposed bus network is shown in schematic form in Figure 15 below:

Figure 15 – Schematic Proposed Bus Network



The GCP are proposing 8 buses an hour - only three fewer than our notional target of 11. However, 4 of the 8 buses have come from other towns and will not be empty. We must assume that the buses from St Neots and Huntingdon will arrive in Cambourne already laden with passengers. In addition, what provision is made for passengers expecting to board the buses at the new A428 P&R? The numbers don't add up. You can't transport 2,077 passengers originating in West Cambourne, Cambourne and Bourn Airfield to either Cambridge, or the Biomedical Campus, with 8 buses and an hour when half the buses are also serving St. Neots, Huntingdon, Papworth and the new park & ride. Neither the applicant, nor the Greater Cambridge Partnership, are being open and honest about what level of modal shift the busway can achieve.

What is clear is that the GCPs current Network Schematic for the C2C busway falls far short of being able to transport 2,077 passengers from the three A428 sites into either Cambridge, or the Biomedical Campus.

If we assume a more realistic modal shift to 18% bus use - that's 1,496 passengers, or 8 buses an hour (a bus every 7.5 minutes) that still leaves 6,818 people departing the three development sites (West Cambourne, Cambourne and Bourn Airfield) between 0700 and 1000 every day. (The sum of 3,534 leaving Cambourne, 2,910 leaving Bourn Airfield and 1,870 leaving West Cambourne minus those potentially travelling by bus).

The reality is that the great majority of these 6,818 people will travel by car. Indeed, the Cambourne village TRICS data tells us that 2,813 cars leave Cambourne between 0700 and 1000. The Bourn Airfield applicant's own traffic assessment predicts 957 cars leaving the new development between 0800 and 09.00. Pro rata that would mean 2,474 vehicles will depart Bourn Airfield between 0700 and 1000. Based on similar predictions Cambourne West will generate departing car trips of 1,590 in the same three hours. That's a whopping 6,877 cars leaving the three developments in the three hours between 0700 and 1000 in the morning. How can that be justified as being sustainable and how can the local authority make any claim with respect to carbon reduction when its own development policy will put so many cars on the road.

Before outline planning permission can be awarded to the Bourn Airfield Development there needs to be a more open and honest debate about traffic generation from the site. In addition, the applicant, and the transport authorities, need to generate, and then publish, more realistic predictions about what degree of modal shift the proposed HQPT system can deliver.

Furthermore, in light of the announcement of the preferred EastWest Rail route (via Cambourne) Bourn Parish Council would like to advocate for the suspension of any related planning application decisions until more details of the route, the location of the station, and the potential for connectivity with other local public transport initiatives are available.

The effect of Bourn airfield-generated traffic on surrounding villages.

We are unhappy with the inadequate traffic estimates in the base flow models provided in the applicant's transport assessment. Many of the data points are unclear with no reasons given for the distribution at each junction. In addition, the base flow models have no legends and interpretation is therefore severely hindered. For example, we rigorously dispute the estimates for traffic flow into Hardwick on the St Neots Road. We also question why there is no explanation given for the traffic consultants' decision to predict that a significant proportion of traffic will exit Bourn Airfield via the east exit at Childerley roundabout but will then travel west. The applicant consultants are suggesting that only 52% of Bourn Airfield traffic will head east. This figure is in direct conflict with the latest Cambourne figure which recorded eastbound traffic at 77%.

Comparing BAD with Cambourne Traffic estimates

The best example of what is likely to happen with traffic generated by Bourn Airfield is to derive estimates pro rata from the actual traffic records taken for Cambourne. There have been two reasonably recent records on Cambourne:

1. TSP record for Mayer Brown Project 13563 over 2 days dated November 2017
2. TRICS record whole Cambourne over 1 day in June 2018

We've based our figures on a pro rata calculation of the car movements observed in the TSP and TRICS data for Cambourne traffic heading east. The TSP pro rata prediction for eastbound traffic from Bourn Airfield in the one-hour peak between 0800 and 0900 is 854 from a total of 1192 cars. The TRICS data predicts a lower figure of 897 cars leaving Bourn Airfield and consequently a lower figure for eastbound cars of 643. The prediction in the applicant's traffic assessment, however, is that only 456 cars will head east from Bourn Airfield. We feel that this is a serious and unjustifiable underestimation. The ramifications of this level of underestimation are clear with lower car movements predicted at subsequent junctions such as the Hardwick roundabout.

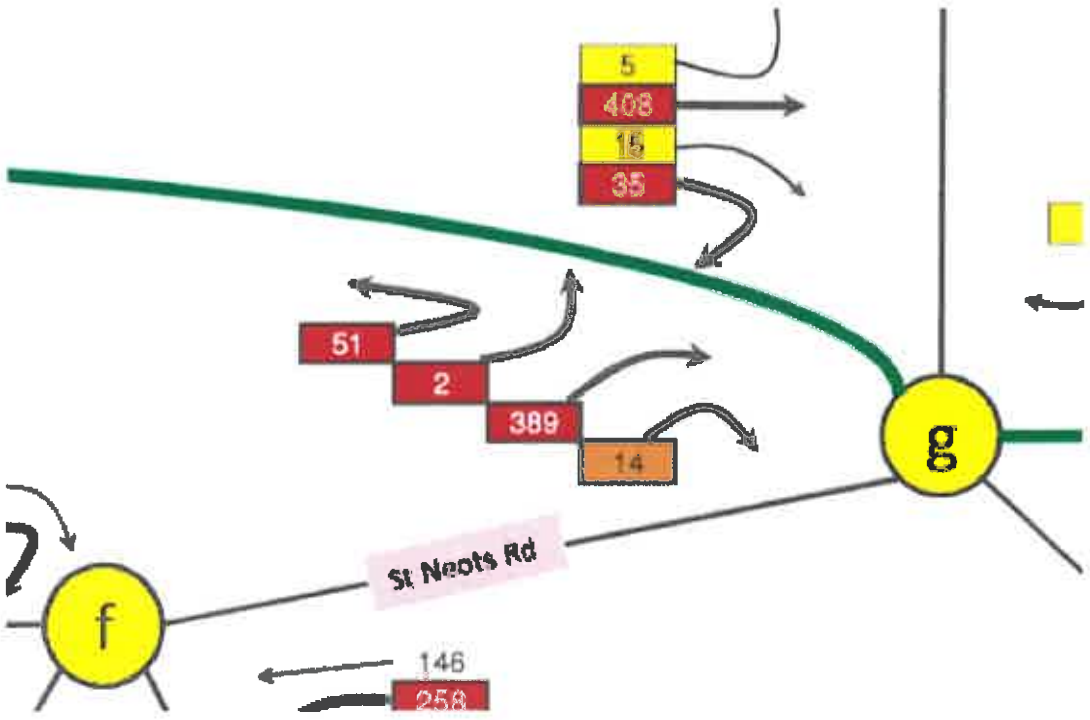
The table below, and the accompanying junction analysis graphic, show the potential discrepancies. We know from the 'All Arms' Mott MacDonald records of November 2018, that 459 cars arrive at the Hardwick roundabout from the St Neots Road. The TSP and TRICS data suggest the traffic generated by Bourn Airfield will mean that an additional 350 (TSP based prediction), or 283 (TRICS based prediction), will join those 459 cars going on to the St. Neots Road. Of the 459 cars registered in the Mott MacDonald data, 188 go into Hardwick village. That would mean that based on the TTSP (and TRICS) data, Bourn Airfield would generate an additional 143 (or 116) cars entering Hardwick village in the morning peak hour 08.00 – 0900. Bizarrely, the Bourn Airfield Traffic Assessment predicts that additional number at only 14 cars. It's clear that these numbers need to be properly interrogated.

Picking up the two different estimates and calculating the effect on Hardwick

	Col2	Col 3	Col 4	Col 5
Morning Peak Hour St Neots Road Hardwick East Bound	Estimate Based on TSP Record Nov 2017 Table 1	Estimate Based on June 2018 Table 1	Estimate by BAD consultants Corridor Flow Model test 6 **	
Current East bound (Cambridge direction) *	459	459	459	
BAD traffic to Hardwick Roundabout –	854	643	456	Includes traffic to all arms off Hardwick Roundabout
Additional BAD traffic to St Neots Road x 41%*	350	283	14	
Estimate total peak traffic with BAD	809	722	473	About 50% of this turns right into Cambridge Road

Table 1

*"All arms" Mott Mac record Nov 2018 ** Base Flow Model Test 6 AM Peak hour estimates from BAD. The base vehicle flow AM peak 08:00 to 09:00



f = Caldecote Roundabout g = Hardwick Roundabout Green route = A428

In addition to our concerns relating to the underestimation of Bourn Airfield generated traffic heading east, and the potential consequences for Hardwick of this underestimation, we are also keenly aware there is little strategic acknowledgement in the traffic assessment that Knapwell will be directly affected by the traffic generated by Bourn Airfield.

Knapwell village centre is a similar distance to the proposed Western Bourn airfield entrance as Bourn village centre and yet the applicant's Traffic Assessments do not cover traffic flows from the St Neot's Road on to the High Street in Knapwell. The new configuration of the A14 has resulted in Boxworth Services being enhanced as an A14 exit. Consequently, Boxworth and Knapwell High Streets are currently being implicitly reinforced by design as the primary north/south route between Boxworth Services and the Bourn Airfield Western exit.

The applicant's Traffic Assessment should include provision for accurate forecasting, and ongoing monitoring of traffic into Knapwell in order to preserve the character of this historic conservation area. This will help ensure the safety of village residents, limit traffic on the narrow, unmaintained roads and, in turn, mandate release of S106 mitigating funding and counter measures, if the suspiciously low traffic forecasts are exceeded.

To the broader point concerning the monitoring of all local roads to measure and assess the impact of the car movements generated by the new development at Bourn airfield, Bourn Parish Council will expect rock solid assurances that we will be closely involved in setting the threshold for when, and what, mitigation measures should be implemented.