

Hinxton Parish Council's response to the South Cambridgeshire District Council consultation on outline planning application S/4099/17/OL by SmithsonHill Ltd for an AgriTech technology park in Hinxton Parish

Hinxton Parish Council objects to the planning application by SmithsonHill Ltd. We here argue that there are substantial material objections which are grounds for its rejection. There are five sections which demonstrate:

1. The application does not comply with the SCDC's adopted 2007 Local Development Framework, or its draft Local Plan, or with the National Planning Policy Framework
2. The SmithsonHill business plan and stated objectives have no credibility
3. The application's traffic analysis and prescriptions have no credibility
4. The environmental impact of the proposal would be adverse and contrary to regulations
5. The consultation process followed by SmithsonHill has been fundamentally flawed

1) Compliance with the SCDC draft Local Plan and adopted 2007 Local Development Framework, and with the 2012 National Planning Policy Framework

The proposed development is not included in the draft South Cambridgeshire District Council Local Plan. The draft Local Plan (draft LP) is in the final stage of the approval process and is now likely to be confirmed in all relevant respects within the next few months. It has identified sufficient land to support employment in other locations in the District. South Cambridgeshire is not in need of active employment creation measures; it has one of the lowest unemployment levels in the country. It 'has a good supply and range of existing employment sites ... including significant opportunities at research parks for high technology and Research and Development (R&D)'¹ The site is not one of South Cambridgeshire's designated Established Employment Areas² of which Policy E/15 states that: 'Permission will be refused where there would be a negative impact on surrounding countryside, or landscape character'³ It would be a mistake to identify additional employment-facilitating land beyond the draft Local Plan until the potentially substantial impact of other prospective development in nearby Established Employment Areas and other accepted sites close to the A1301 is known⁴.

The proposed development is contrary to Hinxton's designation as an 'infill village' (2.59) where 'development on any scale would be unsustainable ..., as it is will generate a disproportionate number of additional journeys outside the village'⁵. As recently as 10 January 2018, South Cambridgeshire Planning Committee reaffirmed its commitment to its definition of this: 'Infill Villages are generally amongst the smallest villages and have a poor range of services and facilities and it is often necessary for residents to travel outside the village for most of their daily

¹ South Cambridgeshire Local Plan, Proposed Submission, July 2013, 8.9, p 166.

² South Cambridgeshire Local Plan, Proposed Submission, July 2013, Policy E/15, 'Established Employment Areas', p 182.

³ South Cambridgeshire Local Plan, Proposed Submission, July 2013, Policy E/15, p 182.

⁴ Established Employment Areas include (c) land at Hinxton Road, south of Duxford (d) Granta Park in Great Abington, (e) Wellcome Trust Genome Campus in Hinxton, and (k) the former Spicers site in Whittlesford. Also relevant are the nearby Babraham Research Campus, the Sawston Trade Park at Pampisford, and Chesterford Research Park, as well as the 5000-home North Uttlesford Garden Community in Uttlesford District Council's draft Local Plan.

⁵ SCDC draft Local Plan, 2013, p 35

needs. Infill Villages generally lack any food shops, have no primary school etc and therefore development on any scale would be unsustainable in these villages.’⁶

It is contrary to the draft Local Plan's S/1 Vision that 'Our residents will have a superb quality of life in an exceptionally beautiful, rural and green environment' and S/2 Objectives (b) 'To protect the character of South Cambridgeshire, including its built and natural heritage, as well as protecting the Cambridge Green Belt. New development should enhance the area, and protect and enhance biodiversity.' (2.25)

The proposed development is contrary to the current National Planning Policy Framework (DCLG March 2012). In particular with regard to core planning principles (para 17) '...recognising the intrinsic character and beauty of the countryside...'; 'contribute to conserving and enhancing the natural environment...'; 'encourage the effective use of land by reusing land that has been previously developed (brownfield land)...'; and 'conserving and enhancing the natural environment' (para 109); 'protecting and enhancing valued landscapes, geological conservation interests and soils'; 'minimising impacts on biodiversity and providing net gains in biodiversity where possible...'

The proposed development is contrary to the South Cambridgeshire's current 2007 Local Development Framework (LDF) in a number of respects that will now be examined.

2) SmithsonHill business plan

The business plan and stated purpose of the proposed development have no credibility.

The project purports to be focused on the global issue of improving food production by promoting R&D. While this is an admirable marketing objective, there is no reason to believe that this development will contribute towards it. Although much of the Planning Statement is devoted to gratuitous comment about the global need for improved food production and other general issues, para 2.83 (p 40) clarifies that SmithsonHill's intent is to establish a standard commercial business park that does no more than offer space to paying tenants.

The Parish of Hinxton is host to the Wellcome Trust Genome Campus, which provides a useful comparator for the SmithsonHill proposal. In establishing the Genome Campus some 20 years ago, the Wellcome Trust was also seeking to address a global issue, the sequencing of the human genome as a basis for understanding and addressing human disease. The Wellcome Trust has shown strong intellectual leadership and has used its own funds to support research on the campus since inception. Wellcome's plan originated within the Trust itself and was subsequently reinforced by world-leading scientists recruited to the campus, as well as by the Trust's setting rigorous goals and standards that ensured that the focus of research was never lost. Only after the human genome had been sequenced did the Trust allow the research focus on the campus to broaden and a small number of select biotech companies to locate on to the campus to enable the genomics work to be fully exploited. Overall, this proved to be a highly effective strategy and, subsequent to the sequencing of the human genome itself, enabled significant inroads to be made into understanding and forming the basis for the treatment of diseases that affect populations the world over.

By contrast, SmithsonHill has shown no intellectual leadership. It has neither identified key goals for R&D that might be important for addressing global food production, nor does it have a plan as to how this might be achieved. It has not identified key local technologies or expertise that might form the

⁶ SCDC Planning Committee, 10 January 2018, para 87,
<http://scams.moderngov.co.uk/documents/s103962/Committee%20Report%20-%20updated%202%20Jan.pdf>

basis and focus of R&D at the proposed site, nor is it proposing to inject any funds to support R&D in key areas to meet its stated purposes. It has, moreover, set out no governance principles or guarantees that will guide the nature of R&D or the selection of companies to be located on the site. The sole statement regarding the focus of the campus is to be found at para 3.33 (p 51), where it is merely indicated that the campus shall be devoted to companies 'associated with the AgriTech sector'.

There is no evidence of participatory interest by any leading R&D-oriented agritech organisations. Hinxton PC have contacted all the commercial organisation providing 'letters of support' in SmithsonHill's Planning Statement. The four that have responded so far (Agri-Tech East, NIAB, Bayer Crop Science, and Beeswax Dyson Farming) have all clarified that they have no intention of using the site. The potential tenant most mentioned by SmithsonHill in its publicity and presentations – Cambridge Food Hub – is a wholesaling and distribution operation that appears to have no R&D activities at all. It would presumably fit in planning Class B1(a) (an office) or Class B8 (Wholesale warehouse, distribution centres and repositories). But it could not qualify for Class B1(b) (High technology/ R&D), and there is no distinct planning Class for 'agritech'⁷. Which raises serious questions as to what Class of development the site is intended to be open for, and whether, once built, there would be any constraints towards R&D on the activities of tenants. The focus and governance of the proposed development are insufficient to allow it to fulfil any of the stated aspirational goals of addressing global food production.

There is no scientific or commercial reason why the proposed AgriTech Park should be sited in Hinxton.

SmithsonHill's proposal purports to build upon the value of a Cambridge cluster. Although South Cambridgeshire is committed to the development of 'employment clusters', these do not include anything like 'agritech'⁸. Sources cited in the proposal show that the key focal areas of expertise within the Cambridge area are the medical life sciences and software and electronics. The East of England Science and Innovation Audit 2017⁹ indicates that the main regional centres of excellence in the agritech sector are located in:

- Norwich
 - John Innes Institute (plant genomics, plant health, plant breeding)
 - Quadram Institute (food sciences and security)
 - Earlham Institute (plant genomics)
 - Sainsbury Laboratory (plant disease and resistance)
- Harpenden (Hertfordshire)
 - Rothamsted (plant breeding and productivity, food sciences and security)
- Riseholme/Holbeach (Lincolnshire)
 - Lincolnshire Institute for Agrifood technology (food sciences and sustainability)
 - National Centre for Food Manufacturing (food sciences)
- Cambridge
 - National Institute of Agricultural Botany (NIAB) (plant sciences, crop improvement)
 - University of Cambridge, including the Sainsbury Laboratory (plant development) and groups focused on robotics and automation, biosensors and bioenergy
 - Cambridge Centre for Crop Science ('C3S'), the recently announced joint venture between NIAB and the University
- Cranfield
 - National Soil Resources Institute (soil and land management)

⁷ South Cambridgeshire Local Plan, Proposed Submission, July 2013, p 286.

⁸ South Cambridgeshire Local Plan, Proposed Submission, July 2013, Policy E/9 'Promotion of Clusters', p 177.

⁹ East of England Science and Innovation Audit, <http://www.gcgp.co.uk/wp-content/uploads/2017/09.Appendix-2-Agritech-Final.pdf>

These locations of key agritech activities suggest that there are no particular benefits to locating a new agritech business park at Hinxton, as SmithsonHill propose. Indeed, this might be regarded as a rather poor location for a new agritech campus, simply on the basis that – with the exception of the University of Cambridge research activities – the key science is to be found at institutes at least an hour or more driving time from the proposed site. Nor is it evident that there would be any benefit to the proposed agritech park from being sited next to the Wellcome Genome Campus in Hinxton, as SmithsonHill had proposed in its early consultations. Although the application suggests that research at the Wellcome Genome Campus ‘... is likely to also be transferred to plant genomics over the next 10 years’¹⁰, there is no evidence for this statement. Indeed, this would appear to be outside the Wellcome Trust’s charitable remit and endowment which are focussed on human and animal physiology and medicine.

There is no scientific or commercial reason why the proposed park should be sited on open farmland

The proposed development is contrary to the requirements: to ‘Make efficient and effective use of land by giving priority to the use of brownfield sites ...’ (LDF DP/1 (c)); that ‘Outside urban and village frameworks, only development for agriculture, horticulture, forestry, outdoor recreation and other uses which need to be located in the countryside will be permitted’ (LDF DP/7 1); and ‘To protect high quality agricultural land’ (LDF NE/j). It is not a development that ‘protects and enhances the character of the district and local distinctiveness’ (LDF Objective DP/d).

The siting of this proposal on high quality arable land could only be justified if proximal crop trials were of prime importance to the tenants. This is not the case. There is no evidence of interest by any firms that might wish to use the adjacent fields for crop trials. The temperate climate and soil would in any case be unsuitable for plant breeding and other agricultural technologies envisioned by SmithsonHill’s vision of a ‘globally significant park for AgriTech’¹¹. A stronger case for an agritech business park could be made for many other sites in the East of England which would have far better infrastructural and environmental justification. Other local science and business parks are either on brownfield sites or on old estates with substantial woodland which partially hides them from view. The only credible explanation why the application is concerned with this particular site is that it is owned by a local landowner, Russell Smith Farms, for which SmithsonHill is a joint commercial venture with Hill Commercial Investments. While the desire to get a better financial return on their land is understandable, this is not a valid planning reason, and certainly not a reason for deviating from South Cambridgeshire’s draft Local Plan.

3) Traffic and Transport

The proposed development does not ‘Minimise the need to travel and reduce car dependency’ (LDP DP/1 (b)); it does not provide ‘Appropriate access from the highway network that does not compromise safety, enhanced public and community transport and cycling and pedestrian infrastructure’ (LDP DP/3 (b)); and it does nothing ‘To reduce commuting distances and the need to travel, particularly by car, by bringing home and workplace closer together...’ (LDP ET/d). It is contrary to the requirement that ‘Development must be located and designed to reduce the need to travel, particularly by car, and promote sustainable travel appropriate to its location’ (draft LP T1/2 1). The site does not have ‘sufficient integration and accessibility by walking, cycling or public or community transport...’ (draft LP T1/2 2).

The application’s traffic analysis is not credible

¹⁰ Terence O’Rourke, 2017, Planning Statement, para 3.5, p 45

¹¹ Planning Statement p 3

The traffic analysis conducted by Alan Baxter Ltd on behalf of SmithsonHill utilized traffic flow measurements in 2017 at various sites at peak times, and used these data in a computer model to assess current junction performance at peak times at various junctions near the proposed development. Projections were then made for future traffic flows (to 2030), upon which the junction performance computer model was used to predict traffic congestion. Unfortunately, the results of that modelling exercise applied to the current traffic situation at two critical roundabouts on the A505 – the A505/M11 and the A505/A1301 ('McDonalds') roundabouts – are grossly inaccurate. They seriously understate the actual congestion experienced currently (para 12.68 and Table 12.9). The model indicates, for example, that the A505/A1301 roundabout should currently experience delays in the morning peak of only 7 seconds and queues of only 3 vehicles.

In practice, long queues and delays on the A1301 during peak periods are typical. Appendix 1 of the present document sets out Hinxton PC's empirical observation of actual queues and delays, obtained randomly over the past several weeks. Queues on the north-bound A1301 entering the A505/A1301 roundabout are shown to be often of the order of 50 to 70 vehicles, with delay times up to 20 minutes at both morning and evening peak. There is ample anecdotal evidence (available on request) that many Genome Campus staff routinely undertake long (and typically 'rat-running') detours to avoid these queues. The current situation at the A505/M11 roundabout is similar. The planning application's computer modelling estimates queues of 3 vehicles and delays of only 7 sec entering the roundabout (Table 12.9). Actual experience is that queues exiting to the A505 at Junction 10 and entering the roundabout are commonly backed up on the entirety of the motorway slip roads and continue back along the M11 verges (described by some as 'an accident waiting to happen').

We can only conclude that the computer modelling on which the traffic analysis is based is ineffective and inaccurate and cannot be relied upon to provide valid predictions of either current or future traffic.

This is fully confirmed by more systematic evidence provided

- i. By the traffic survey conducted in March 2017 by MayerBrown for the Sawston Trade Park planning application (S/2284/17/OL)¹². This reports 'The A505/A1301 roundabout junction currently experiences queues in the morning and evening periods' (1.4, p373) and that 'The M11/A505 roundabout junction currently queues in the morning and evening peak periods' (1.9, p375). 'It is concluded that both the A505/A1301 roundabout and the M11/A505 roundabout are currently over capacity in both the morning and evening peak periods ...the junctions assessed are currently operating at capacity.' (1.18, 1.19, p378). On the A505/A1301 roundabout, the linked K&M traffic survey conducted on 30 March 2017 shows, in the morning, slow moving queues of at least 20 to over 70 vehicles from 0715 to 0900 from the east, of at least 30 to over 70 from 0815 to 0915 from the south, and of over 40 vehicles from 0755 to 0845 from the west. In the evening there were slow moving queues of at least 50 to over 70 vehicles from 1710 to 1800 from the south, and, from the west, slow moving queues of at least 20 vehicles from 1625 to 1810 (K&M, p381, 382).
- ii. By the transport assessment conducted by Granville Consultants in March 2015 in another recent nearby planning application (S/1110/15/OL), for expansion of Granta Park.¹³ Para 7.8 states that 'Modelled analysis of Junction F [A505/A1301 roundabout] did not give results comparable with observed peak time queue lengths ... Observations suggested that observed 'queues' consisted of a number of stationary vehicles at each junction with slow moving traffic behind..' In Para 7.11 it is stated that 'This junction operates over capacity in the 2015 base year'. 'Entry Lane Simulation demonstrates this via queue lengths. Observations confirm these queue lengths are robust and, in addition, there is significant slow moving traffic (i.e. less than 5mph) beyond stationary traffic' and 'For 2017 and 2032 ... the junction capacity

¹² MayerBrown/Shrimplin|Brown, Further response to Cambridgeshire County Council, 11 October 2017

¹³ Glanville, Transport Assessment, Phase 2 Land, Granta Park, 30 April 2015

issues will worsen in both 'with' and 'without' development scenarios'. The predicted junction performance with development was furthermore significantly worse than without (Table 12a).

In sharp contrast, mentions of current traffic congestion in the SmithsonHill application are understated and provided as asides – e.g., a single sentence 'From observations during site visits, it is apparent that parts of the local highway network are busy in the AM peak and traffic is not completely free-flowing' (p 12.30). There is no mention of the westbound traffic on the A505 (which is nearly as heavy as that eastbound) or in either direction during the evening peak, nor the often long stationary queues on the A505 and on the A1301 at these times. The traffic flow data on which the computer model of junction performance is based are provided only as 'two-way' flows which is misleading, as the traffic flow in one direction is typically markedly different than the other and the averaging inappropriate. In addition, the statement in several places in Chapter 12 that 'full details are provided in Technical Appendix J' is inaccurate – e.g., the data in Tables 12.4, 12.5 and 12.8 do not appear in the Appendix; furthermore, Appendix 8 to Technical Appendix J (which summarises the results of the computer model for junction performance) is incomplete.

A number of critical elements are not included in the traffic model. The estimates of traffic generated are apparently based on expected SmithsonHill site employee numbers; whether and how associated traffic of customers, caterers, supply vehicles, warehouse-related HGVs etc. are also included is not clear. More importantly, the estimates ignore any expected consequences of other local developments, notably Sawston Trade Park, the Spicers site at Whittlesford, new housing in Haverhill, the proposed North Uttlesford Garden Community, and potential future expansion of the Wellcome Genome Campus and the Chesterford Research Park. They also downplay the fact that, throughout the estimated 10-year period of continual building work, construction vehicles will have a substantial adverse impact on the A1301 and the Hinxton surrounds.

The proposed roundabout improvements will not enhance overall traffic flow or reduce congestion

The proposed minor roundabout modifications are local and cosmetic. They would do little more than shift the congestion problems a bit further along the road. Adding a lane to the A505 at the Hunts Rd roundabout will not address the problem of the narrowing of the A505 between that roundabout and the 'McDonalds' roundabout with the A1301 to the east. Adding a lane to the latter roundabout to improve east-west flow on the A505 will cause longer queues on the A1301 in both directions, particularly with traffic from the expanded Sawston Trade Park site. It would become more difficult for traffic entering from the south and continuing across to the north-bound A1301 or crossing the west-bound traffic to the east-bound A505. The situation for traffic on the A1301 entering the roundabout from the north and exiting on the A505 to the west would be similar. The narrowing of the A505 from two lanes exiting the roundabout westwards to a single lane (just past the BP/McDonald's service area) would quickly lead to queues backing up into the roundabout. Traffic signals would be necessary on the roundabout to address this but they are not suggested. SmithsonHill makes no practical suggestions as how even these minor modifications should be financed and implemented.

Only one entrance to the site is proposed. This would be via a new three-arm roundabout on the A1301 north of Hinxton's North End Road. It is not said why this entrance should be on the A1301 rather than the substantially broader A505 or A11. As the A1301 is a single-carriage road, this new roundabout would create further hold-ups and, since it is a 50-mph-restricted winding road with blind curves, it would be unsafe. Entry/exit rates at the site entrance off the A1301 for the expected 2000 employee vehicles (let alone other vehicles) over a 1-hour rush-hour period would be about 33 vehicles per minute, at an average of 1.8 sec per vehicle. That would probably exceed the capacity of the roundabout, leading to queues on the A1301 at the proposed roundabout in the morning, and

backing up into SmithsonHill's site in the evening. Such congestion at its entrance would severely damage the commercial viability of the site.

Parking will also be a problem as a result of the proposed car parking limitations on the SmithsonHill site. The application indicates that only 0.5 parking places per employee will be provided, significantly less than the 1.0 indicated from guidelines in the South Cambridgeshire emerging Local Plan. This is likely to lead to spillover parking, particularly during bad weather when employees would prefer to drive to work. This would be likely to take place along the side of the A1301, on Tichbault Road (which is owned by the Wellcome Trust) and the spur road leading to Hinxton Grange from Tichbault Road, and on North End Road and in Hinxton village, further adding to congestion. And, again, this would damage the site's commercial viability.

The proposed modal shifts in transport are highly unlikely

A critical assumption in the SmithsonHill traffic model is that there will be a modal shift in transport from predominantly single-driver private cars to a higher proportion of people using public, bicycle or pedestrian commuting. There cannot, of course, be any modal shift from the present position because there is currently no employment on the site; any traffic created is additional traffic. But if the objective is to shift the modal balance within this additional traffic from the average for the region, this is highly improbable. The isolation of the site would make it an inconvenient place of work. Very few of the likely workforce could live within walking distance. In addition, for employees to get from the site to the nearest shops and services, which are in Sawston, there would be a walk of about 4 km (about three-quarters of an hour). The closest rail station at Whittlesford Parkway is approximately 2.5 km from the centre of the site.¹⁴ Relatively few of the people travelling by train would be willing to walk an additional half hour between the station and their workplace, particularly in bad weather. Para 12.85 in the application predicts that only 219 employees will be travelling by rail in the morning peak and 173 in the afternoon peak, which, at only about 5 per cent of the 4000 employees employed at the site, is trivial. It is in marked contrast with the proposal's 'target' modal split of 30 per cent bus/rail which is claimed in Technical Appendix J (5.2 and 5.3)

Current public bus transport in the area is very poor. The Citi7 service between Cambridge and Saffron Walden misses the proposed site entirely. The re-routing of this service proposed by SmithsonHill would add 21 minutes to the 5-minute journey between Sawston and Duxford, which is likely to be unacceptable to the Citi7 operation. The 7A service runs to Hinxton relatively infrequently from Sawston. It is suggested in passing that the bus services could be improved, but any bus-stop at the bus/cycle interchange from the direction of the 'McDonalds' roundabout would entail a right-turn against traffic from the A505, which would compound rush-hour traffic problems. And, for the passengers, the business park would still be over 2 km away. Proposed private shuttle-buses (apparently funded by SmithsonHill (12.83)) would still have to negotiate the heavily congested A505/A1301 roundabout as well as the right-turn into the bus/cycle interchange. There is no evidence that the practicalities of improving the bus services have been explored with the transport authorities.

Bicycles are unlikely to provide a significant fraction of commuting. The proposal puts 'target' bicycle use at an optimistic 7 per cent. This is considerably higher than the 3 per cent reported for the nearby Wellcome Genome Campus (Technical Appendix J Table 5.3), which has long been actively fostering cycles and has a heavily subsidized 'green travel' policy¹⁵. Non-folding bicycles are not permitted on any trains through Whittlesford Parkway at rush hours.¹⁶ The proposed new cycle paths

¹⁴ Item 12.32 of the Planning Application says 1.6 km, not 2.5 km, the lower figure being the distance to the nearest edge of the proposed development.

¹⁵ <http://plan.scambs.gov.uk/swiftlg/MediaTemp/1131556-487520.pdf>

¹⁶ <https://www.greateranglia.co.uk/travel-information/your-journey/cycling>

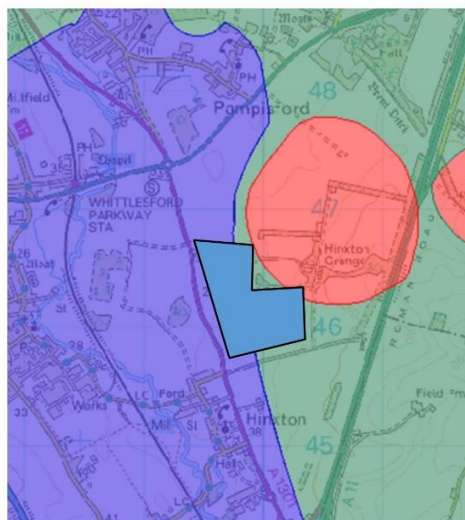
and pedestrian/bicycle/equestrian bridge over the A505/A1301 roundabout might be useful for recreational use but would not provide any significant mitigation for the typically far longer distance commuting needs of the site.

4) Environmental impact

The proposed development would not ‘enhance the area, and protect and enhance biodiversity’ (draft LP Objective (b)). It would not ‘deliver new developments that are high quality and well-designed with distinctive character that reflects their location, and which responds robustly to the challenges of climate change’ (draft LP Objective (d)).

We argue below that the proposed development would have adverse environmental impacts in terms of (i) aquifer damage, (ii) increased flood risk, (iii) pollution, (iv) biodiversity, and (v) landscape.

i) Aquifer damage



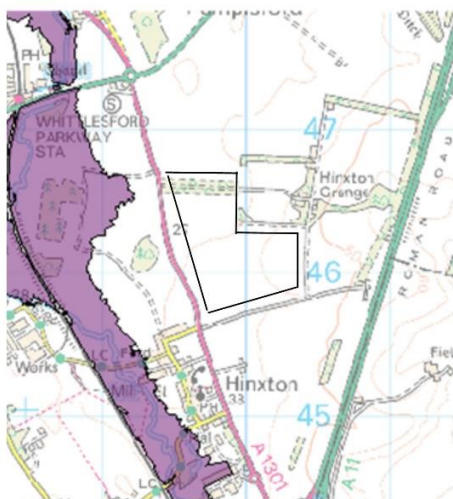
Groundwater source protection zones (source map: Environment Agency)

The proposed development would not ‘protect and improve the quality of the water environment’ (LDF NE/d). On the contrary, it would endanger strategically important fresh water aquifers. The water supply of South Cambridgeshire is 97 per cent dependent on aquifers from groundwater (as opposed to reservoir or river sources), largely from the chalk hills where the proposed development is sited¹⁷. The map shows that the proposed development (turquoise) would be built on important groundwater source protection zones - on top of Zone 2 (green) and Zone 3 (blue) and touching Zone 1 (red). In their evidence to SmithsonHill (provided with the proposal), the water supplier Cambridge Water say: ‘The proposal causes some concern because our Hinxton Grange Pumping Station is situated immediately adjacent to the site....You will also note the shaded areas on the plan, the pink

¹⁷ <http://www.cambridge-water.co.uk/customers/about-your-water-supply>

area is the source protection zone 1 (SPZ 1) and any development likely to affect groundwater within this zone would automatically [be] opposed by the Environment Agency who are statutory consultees. The area shaded green denotes SPZ 2, and development likely to affect ground water in this area would be opposed by Cambridge Water.¹⁸ The area designated for buildings, roads and car-parks is substantial, considerably greater, by comparison, than that of Hinxton village. Although reference is made to use of water absorbent surfaces, pollutant filtering devices and the like, the applicant makes no effort to quantify the likely impact on water absorption, aquifer recharge and water pollution. The proposed development cannot be seen as responding 'robustly to the challenges of climate change'; climate change is expected to increase the variance of rainfall over time. The proposed development will increase those challenges locally. The implied threat to water supply is especially significant in South Cambridgeshire where the annual rainfall is the lowest in the British Isles.

ii) Increased flood risk



Flood warning areas (source map: Environment Agency)

The proposed development would not 'Ensure no unacceptable adverse impact on land, air and water' (LDF DP/1 (l)). On the contrary, it would heighten the risks of flood damage in the River Cam valley. The Cam valley has historically been prone to substantial flooding. The map shows the flood warning areas indicated by the Environment Agency. Flooding covering the purple area has been experienced twice in the last five years. At risk are Hinxton and the Wellcome Genome Campus, as well as Duxford, Whittlesford and further downstream into the city of Cambridge. Climate change is expected to increase the risk by increasing the variability of rainfall. The proposed SmithsonHill development (indicated by black line) is in the immediate Cam watershed, draining due west to the Cam. There are no sluices on the Cam between Great Chesterford and Duxford. Whatever measures might be taken to create absorbent surfaces and to retain rainwater temporarily, the impermeable surface area of the development is likely to be substantial. The proposal gives no consideration at all

¹⁸ Letter from John Brock, Network Engineer, Cambridge Water, 24 February 2017, Hydrock Utility Statement for SmithsonHill (Appendix B, p2)

to flood risk off-site elsewhere in the Cam valley.¹⁹ It makes no attempt to quantify estimates of the impact on either immediate groundwater absorption or rainwater run-off on site or beyond. With regard to flood damage risk in the locality, the proposed development cannot be seen as responding 'robustly to the challenges of climate change' and must be considered likely to increase substantially the risks posed by these challenges.

iii) Pollution

The proposed development would not 'protect and improve the ambient noise environment' (LDF NE/e), it would not 'protect and improve air quality' (LDF NE/i), and it would not 'minimise light pollution' (LDF NE/f).

SmithsonHill accepts that there would be 'some nuisance and annoyance associated with the construction activities and the construction traffic. This will be noise, light and dust/air pollution and can particularly affect babies and pre-school children, older people and those with disabilities and their carers'²⁰ When the site is operational they admit that 'There is a potential for a minor negative health and wellbeing impact linked to the potential increase in motor traffic in the locality.'²¹ There is no attempt to quantify these adverse noise and air quality effects, such as by reporting the typical impacts of comparable sites elsewhere employing 4000 people. We have already demonstrated that the applicant's traffic models greatly understate the traffic consequences of the site. We suggest that the air and noise pollution would be substantially greater than the applicants suggest.

SmithsonHill accepts that the site would create 'substantial' night time light pollution on a permanent basis. The extensive car-parks proposed for the development are all on open ground. It is not evident why they are not planned to be underground as they are at the nearby Wellcome Genome Campus. As proposed they and the buildings would be associated with substantial light-pollution. This is confirmed by the consultants' evidence in Chapter 9 of the Environmental Statement where it is reported that 'The magnitude of night time landscape effects at completion will be **large adverse** and permanent'... 'The degree of night time landscape effect will therefore be **substantial adverse** and **significant**' [their emphases]²².

SmithsonHill's suggestion that the parkland associated with the site 'will be opened up to the public' with substantial amenity value for local people²³ is discredited by the fact that no public parking space is allocated for this.

iv) Biodiversity

The proposed development would not 'protect or enhance biodiversity' (LDF NE/c). It would not 'Conserve and wherever possible enhance biodiversity of both wildlife and the natural environment' (LDF DP/1 (o))

The site is currently private agricultural arable land, roughly half of high quality Grades 2 and 3a (8.16). Most of this would be replaced by buildings, roadways or car parks and would experience constant human activity. Although efforts are proposed to mitigate the impact on biodiversity, it would be neither protected nor enhanced.

¹⁹ Environmental Statement 7.72 – 7.75

²⁰ SmithsonHill, Health Impact Assessment, 10.4.4.2, p 73

²¹ SmithsonHill, Health Impact Assessment, 10.6.1.2

²² Terence O'Rourke, Environmental Statement, November 2017, pp 9-15

²³ SmithsonHill, Planning Statement, paras 6.27, 6.28

As the proposal says: “Some of the features identified as being important habitat features for overwintering birds will be lost as land-take to the proposals, including the areas of open arable farmland favoured by birds such as skylark, grey partridge and golden plover. The proposed development will not only result in a direct impact to these birds’ habitat from land-take but indirect effects on these species are also likely from increased disturbance.”²⁴ Their study acknowledges that the open field parts of the site are important for overwintering birds, especially grey partridge and skylarks and the rarer golden plover (up to 1000 individuals recorded). The hedgerows are significant for linnets and yellowhammers while fieldfares and redwings also use the area. The planning application envisages appropriate hedge management and some hedge replanting, together with some re-seeded areas. But this is liable to be of limited value because of the increased disturbance on the site. The particularly valuable habitat is the open arable farmland which provides ploughed ridges which are especially favoured by the golden plover. The nature of any crop trials is that the land is liable to be split into smaller trial plots, fragmenting such a habitat.

The site is considered to be of county significance for the Annex I species, *Pluvialis apricaria* or golden plover²⁵. These birds over winter on the arable fields in the western half of the site, the southern half of which will be lost and the rest disturbed. SmithsonHill accept that “Habitat will need to be incorporated in the design of the scheme to ensure this species can still overwinter in the area”. They also accept that this is unlikely to be on-site because of the development and the nature of any crop trial layouts. The solution they propose is to relocate the birds to other farmers’ land: “Due to the nature of the development if it is not possible to provide areas of habitat for golden plover and grey partridge within the current designs then off-site mitigation will be required. This can be achieved through liaising with local land owners and enforced through a Section 106 agreement. Through this agreement money will be provided to the local authority which will be used to fund the creation of alternative habitat and the provision of 85ha of replacement habitat for golden plover and grey partridge.”²⁶ In short, SmithsonHill propose to fulfil their duty towards threatened species and special protection areas by relying on the goodwill of other farmers and the readiness of the birds to be relocated to an alternative site. This is not mitigation but wishful thinking.

v) Landscape

The proposed development would contravene the draft Local Plan Vision (S/1) that: ‘Our residents will have a superb quality of life in an exceptionally beautiful, rural and green environment’. Contrary to Objective (b) (S/2), it would not ‘protect the character of South Cambridgeshire, including its built and natural heritage...’. It would not ‘protect and enhance the character and appearance of landscapes and natural heritage’ (LDF NE/b); nor ‘Conserve and wherever possible enhance local landscape character’ (LDF DP/1 (p)); nor ‘Preserve or enhance the character of the local area’ (LDF DP/2 (a)); nor ‘Conserve or enhance important environmental assets of the site’ (LDF DP/2 (b)). It would contravene the requirement that ‘Development will only be permitted where it respects and retains or enhances the local character and distinctiveness of the individual Landscape Character Area in which it is located’ (LDF NE/4), in this case, classified as East Anglia Chalk Landscape Character Area and Natural Area (LDF Figure 7.1, p 74).

The SmithsonHill development would despoil the attractive open landscape that enhances southern approaches to Cambridge. On rising ground, the SmithsonHill site is visible from a considerable

²⁴ Terence O’Rourke, Hinxton Winter Bird Report, March 2015, para 4.6

²⁵ Annex 1: 194 species and sub-species are particularly threatened. Member States must designate Special Protection Areas (SPAs) for their survival and all migratory bird species. The Birds Directive - Environment - European Commission ec.europa.eu/environment/nature/legislation/birdsdirective/index_en.htm

²⁶ Terence O’Rourke, 2015, Environmental Statement Technical Appendix H2, Recommendations 4.6, 4.7, p 10

distance across Cambridgeshire and Hertfordshire. It would have a cluster of many two- and three-storey office blocks sufficient for 4000 employees. The applicants' Figure 9.11 showing the 'zone of visual influence' of the Environmental Statement makes clear that it would be most visible from the west and from substantial stretches of the M11 and of the railway from Cambridge to London Liverpool Street. It is of importance to the integrity of the City of Cambridge to have open countryside to its south rather than the accretion of strip settlement spreading southward along the Cam valley towards Saffron Walden.

The proposed development would not 'Include high quality landscaping compatible with the scale and character of the development and its surroundings' (LDF DP/2 (j)). On the contrary, the proposal to have earth bunds (embankments) of 'up to 3.5 m in height' running almost continuously alongside the A1301 and Tichbault Road for at least 2 kilometres²⁷ would have a crude adverse visual impact on the otherwise open landscape. It would be contrary to Policies DP/2 (1a, j), DP/3 (2m), and NE/4 of the LDF.

The recent rejection in November 2017 by South Cambridgeshire District Council of application S/2777/17/OL is of particular significance. This was for 'up to 20' dwellings at Royston Road, Whittlesford, a little more than 1 kilometre to the west of the SmithsonHill site. This included 'a 2m high, 6m wide earth bund'. The rejection decision said that the development would be 'an alien feature in an otherwise open, gently undulating rural landscape of the Chalklands Landscape Character area' and would 'have an unacceptable adverse visual impact on the local rural character...'. (Decision letter, Reason 1)²⁸. The proposed SmithsonHill development would be set in the same countryside. Its buildings would be far more massive and many times more extensive; the bunds proposed would be substantially higher and at least seven times longer. It would be on countryside exposed to view over a much greater area.

The present open agricultural landscape is the heritage of the local village communities. The openness of the land in question provides meaning to the rural villages of Hinxton, Pampisford and the Abingtons. It is what defines each one of them and creates a unique sense of community. Once destroyed it cannot be recreated. The fact that, as argued above, there is no need for this development to be in open countryside places it in gratuitous conflict with the draft Local Plan's *Vision* and *Objectives*.

5) The consultation process

The consultation process has been deeply flawed. SmithsonHill misled Hinxton Parish Council from the start. The minutes of the PC meeting of 13 July 2015 note: 'Consultation on Agriculture around Hinxton, date to be arranged for a later'. The first consultation, at the next PC meeting on 14 September 2015, was minuted as: 'Emma Fletcher from Smithson Hill came to the meeting and spoke of NIAB's proposal to have a seed trial site including labs and farm buildings on the land originally earmarked for Hanley Grange.' The PC was well-disposed towards NIAB (formerly the National Institute for Agricultural Botany) which is a Cambridge-based scientific research and development organisation of high international repute. The PC's minuted view was 'Very early days but in principle seemed a good idea as this would stop any more plans to build houses on the site'. At the following meeting, on 9 November 2015, the minutes report; 'Emma Fletcher from SmithsonHill came to talk about the proposals for this venture based on the land bounded by the A505, the A1301 and the A11. NIAB have to move from their current land, the soil in this area is ideal for the seed

²⁷ Earthworks Strategy, 6.2, map Appendix C, November 2017

²⁸ 'Refusal of Planning Permission', 3 November 2017, letter to Beacon Planning Ltd from Stephen Kelly, Joint Director for Planning and Economic Development for Cambridge and South Cambridgeshire

trials which they would like to carry out, still at an early stage but would be in the region of 650 acres of land along with agricultural buildings and lab space, approx. 35 staff which would fluctuate with seasonal workers, also small groups of visitors from time to time. ... The land would be leased for 25 years.' It was noted that the consensus of the PC 'was that this would be preferred to housing but [there were] deep concerns for the extra traffic....'.

This initial consultation proved to be based on wholly false assertions. When, six months later in June 2016, SmithsonHill presented its initial plans at a display in Hinxton Village Hall, it became clear that they were for a completely different project. It indicated that not 35 staff but several thousand staff would be employed on the site. It is improbable that they were unaware of this at the time of their initial presentation. The renaming of the company as SmithsonHill Ltd in July 2015 is unlikely to have been solely on the basis of possibly leasing the land to NIAB.

The evidence provided by SmithsonHill about the commitment of NIAB to their project is culpably misleading. In their Planning Statement (dated November 2017) they provide a number of 'letters of support'. All but one of these are dated between April and September of 2017. The exception is one from NIAB, which is dated 19 May 2015, which says 'We are therefore keen to take forward our discussions with you. ...Please treat this letter as an expression of interest...' (p153). In response to Hinxton PC's enquiry in December 2017, NIAB's Chief Operating Officer stated: 'Since we provided our letter of support in 2015 to Smithsonhill, NIAB's requirements have changed and we are therefore evaluating other options for our trials activities as well as redeveloping the NIAB Cambridge site. Part of this redevelopment is in partnership with Cambridge University and includes the new Centre for Crop Science. Under these circumstances, we have made no commitment to Smithsonhill.'²⁹ SmithsonHill presumably were aware of this alteration in NIAB's position when they assembled the present case to SCDC³⁰, but they chose not to acknowledge it in their planning application.

SmithsonHill's consultation exercise appears to have been no more than the cosmetic ticking of boxes in the application process. As they make clear in their 'Statement of Consultation', SmithsonHill have been energetic in organising exhibitions and surveys. Hinxton PC has acted in good faith to assist them in this. But the main issue on which SmithsonHill have sought local opinion has not been their industrial development proposal, but shortcomings of the local traffic and transport situation, for which their proposal provides no significantly resourced solutions. The feedback they have received from people in Hinxton on the development project itself has been consistently hostile to the large scale of their proposal in terms of number employed, but SmithsonHill have made no concessions on this whatsoever. By focussing on known discontents about traffic, SmithsonHill appear to have sought both to claim false credit for consultation and to distract attention from their proposed development. This behaviour is contrary to the intentions of the national planning procedures.

6) Conclusion

The proposed SmithsonHill Agri-Tech technology park is misdescribed, misconceived and misplaced. Its impact on the traffic and the environment of the locality is grossly underestimated and any proposed mitigation measures are inadequate and under-financed. It is strongly opposed by Hinxton Parish in which it would be placed.

William Brown (Chair, and on behalf of, Hinxton Parish Council) 22 January 2018

²⁹ Email from David Neill, Chief Operating Officer, NIAB, 14 December 2017

³⁰ Cambridge Centre for Crop Science was established in 2015:

http://www.niab.com/pages/id/427/cambridge_centre_for_crop_science_-_3cs

Appendix 1

Data collated by Hinxton Parish Council on traffic queuing time and number of vehicles in each queue at the McDonald's (A505/A1301) roundabout

- Hinxton Parish Council asked participants to collect data on the length of queue time and the number of vehicles in each queue at the McDonald's roundabout between late November 2017 and January 2018 at peak times of weekday.
- Around 20 volunteers recorded data for the queue time, number of vehicles in the queue and the direction of approach to the McDonald's roundabout. The data were recorded during weekday peak hours (between 7am and 10am, and 4pm and 7pm). The volunteers lived in Hinxton, or commuted to the Genome Campus by bus or car, travelling past the McDonald's roundabout on a regular basis.
- Results show the queue time (Figure 1) and number of vehicles in each queue (Figure 2), by the direction of the approach to the McDonald's roundabout and the date and time of day.
- There are fewer data collated on number of vehicles in each queue than for the queue time because a driver can more easily monitor the time taken waiting in a queue than count the number of vehicles in the queue of which they are a part. Many queue lengths were measured by driving away from the roundabout contrary to the queue in order to count accurately the queued vehicles approaching the roundabout.
- These data demonstrate that the roads around McDonald's roundabout typically reach capacity during peak hours with substantial queues that can reach in excess of 70 cars from the southern approach and queue times in excess of 20 minutes. Similarly, queues are often observed that stretch along the A505 from at least the M11 to the McDonald's roundabout.
- Comments by the volunteers (available on request) show that there is active avoidance of the McDonald's roundabout if long queues are observed by a car driver or suggested online by Google map traffic data. These comments demonstrate that there is rat-running through local villages to avoid these queues with the current level of traffic.

