Combined Parishes Response to Sizewell C DCO Open Floor Hearings

The Combined Parishes include:

Butley

Capel St Andrew

Chillesford

Snape

Sudbourne

Wantisden

Thank you for the opportunity to speak I am Tim Beach Chair of Snape PC and I have been asked to make to make joint representations in order to assist the efficient running of the hearing for the communities in the parishes of Butley, Capel St Andrew, Chillesford, Snape, Sudbourne and Wantisden. We have agreed to make a joint submission that covers areas of common concern. Each of the parishes has made individual representations already and will continue to reserve the right to do so as necessary.

The parishes have a combined population of over 1000 people and cover over 6k hectares. The villages all lie within an area referred to locally as the peninsula adjacent to the east coast and bounded by local rivers and to the east of B1069 (see appendix 1 map). All have high levels of tourism and mixed vibrant communities. We will provide additional background information relating to the communities in our written submission to follow.

This summary reflects our oral representations on the concerns of the impact to the quality of life of our communities and has been divided into topic areas accepting that there is some level of overlap and is as follows:

Traffic and Transport

As combined Parishes (CPs) we welcome the recognition by EDF of the impact of traffic on the existing under-developed road system. The proposals submitted in January 2021, revised from those submitted in May 2020, recognises the need to find additional and alternative solutions to the original road-led freight strategy. However, the CPs also note that since then:

- the amount of material to be brought to site has increased by 20% thereby adding further demand on whatever freight transport methodology is used;
- the new integrated freight management strategy incorporating rail and sea freight still remains unclear as to its implementation.

The CPs are concerned that the latest proposals are highly complex with their delivery dependent on many other key parties outside the control of EDF. We seek reassurance that the proposals are both realistic and deliverable within tight timescales. These proposals need to make a material impact on the level of traffic in the area early in the construction period. The CPs note that should either the beach landing options and/or the rail proposals be delayed or be deemed unviable then the result can only be significant additional increase in road traffic.

The CPs wish to highlight that it is not just the volume and frequency of HGV's that are of concern but also the associated high volume of light goods vehicles, buses and cars. Based on the current publicly available information, the CPs have no clear picture of how these will be effectively managed both to the Sizewell C site but also on the return journeys.

Accessing east Suffolk by road from the rest of the country relies largely on 2 main roads A14 and A12 both of which have little in the way of alternatives along their route should these roads be blocked for whatever reason. There are severe known bottlenecks when approaching east Suffolk from the south (such as the A12 / A14 junction at Copdock, the Orwell bridge, the Seven Hills junction, the dual carriageway past Martlesham and the Woodbridge bypass plus the numerous single carriage way sections) and the north (Blythburgh bridge and numerous A12 single carriage way sections) even before reaching the currently inadequate access routes for heavy traffic to the Sizewell site from the A12.

Whilst the CPs are located away from the A12 and the proposed new access road we have a justified concern of how this significant volume of additional traffic on the A12 will impact on the day to day lives of those people who already are living in the CPs. The parishes on this peninsula rely on a limited network of narrow and windy roads whose main access to the A12 to travel south is at Melton and north is at Friday Street. The residents and visitors to the area are almost totally dependent on their cars as there are no real alternatives. We already experience problems and delays when the A12 is

blocked or traffic diverts to the local B1069 and B1084. These are winding rural roads and the only vehicular access to our homes and businesses.

In addition, the CPs are concerned that at this late stage in the process there are still issues outstanding about the 2 or 4 village bypass and the new access road. We have previously made the point that without a 4 village bypass then the B1069 running north from near Woodbridge to Snape will become, de facto, the bypass at times of heavy congestion or serious accident. This congestion and the resultant pollution is not uncommon now and will impact on all our communities to a far greater level if the project is approved.

CPs are especially concerned about the following:

- The ability of the emergency services to rapidly access the area and in particular getting to/ from Ipswich hospital and attending life threatening incidents by all emergency services.
- Ease of access to routine medical needs at Ipswich hospital or from outreach support such as district nurses
- The ability to access the north such as Dunwich, Southwold, Norwich, Lowestoft, Aldeburgh and Leiston without having lengthy delays due to Sizewell C traffic.
- Access onto the A12 at Melton with in-combination effects of the railway crossing, traffic lights and new container storage depot in Melton and crossing the A12 at Friday Street to the A1094 the main route to the popular seaside town of Aldeburgh which already is challenging during periods of high traffic flows.
- There are also potential consequences for the two prisons at HMP Hollesley Bay and HMP Warren Hill as well as for the Rock Barracks at Sutton Heath outside Woodbridge.
- Access to local schools: Snape Primary and Orford Primary Schools which serve a wide catchment area and secondary schools Farlingaye (Woodbridge), Thomas Mills (Framlingham), Saxmundham and Leiston. Children travel by private car and school bus to these schools from a wide catchment area and increased traffic will undoubtedly increase travel times for our local children.
- The unsuitability and maintenance of the local road network to the volume and size of new Sizewell C related traffic
- Sizewell C workforce or local residents (in the wider area) looking to avoid the congestion on the A12 and using the road network of our CPs

as alternative routes (rat runs) thereby impacting on the quality of life of the residents.

- There are also worries about fly parking by members of the EDF workforce in the area which would be hard to predict in advance.
- The prevalent use of Satnav may also mean that roads which were previously remote/quiet and little used may have significant increases in traffic volume as the algorithms recalculate the 'fastest' route.
- The area is increasingly popular for recreational cyclists. There is already concern about the safety of cyclists. The narrow windy roads and speeding traffic are a lethal combination and additional traffic will exacerbate the risks.
- The congestion in the area may have other unintended consequences for local businesses. These may include
    - Increased travel times and therefore costs especially for local workforce and agricultural and agency workers.
    - Issues of animal welfare with increased unreliability of travel times when transporting livestock.
    - Increased congestion and its attendant impact to those moving large agricultural machinery down an already narrow road network.

The CPs are particularly concerned about the impact of this congestion on the area's vitally important tourism sector. This is a popular tourist destination for holidaymakers keen to enjoy the coast and heath landscape of our AONB. With the huge increase in traffic movement per day on our roads tourists will be reluctant to visit the area because of road traffic congestion as well as a loss of the peace and tranquillity of the area. This is something EDF acknowledges as a risk.

The integrated freight management proposals from EDF in January 2021 put forward an aspiration proposal for extra rail freight transportation especially at night. Whilst the CPs with the exception of Snape, do not have the rail network passing directly adjacent to our parishes, our residents make use of the local branch line service to connect with the main line rail network. We have concerns about the viability of this proposal both in terms of noise and vibration impacts on those living close to the railway and also the impact on the scheduled services depended on by local residents, businesses and

students. We note that the results of relevant impact assessments are yet to be made public which in effect still leaves the proposal as an aspiration rather than a reality.

Both the proposed marine landing/jetty proposals and the rail and road improvements will take time to deliver. The evidence from Hinckley Point C is that because the construction of these elements was undertaken at the same time as site construction traffic was already operational leading to greater congestion and lengthened road infrastructure improvement times. If they are to be undertaken then these ***should be implemented in advance*** of the arrival of construction traffic.

The CPs are concerned that currently, there is a lack of clarity about how the increased and considerable freight, service and worker traffic to and from the site will be monitored and what level of control the developer can have to ensure the impacts and inconvenience are minimised to existing local residents and businesses. The applicants have stated that they can manage traffic through the use of vehicle monitoring systems, ANPR technology and strict contractual conditions but given the volume of the traffic movements daily it is difficult to see how this could be monitored and effectively policed on a daily basis.

Of particular concern will be the cumulative impact of both this extended construction project and the parallel construction project for the Friston windfarm subject of a separate DCO. Assessment of the traffic impact for SPR puts the traffic volumes at near peak capacity at busy periods already without the additional Sizewell traffic.

Finally on transport, a core concern for the CPs and the residents of the area is the environmental impact on an Area of Outstanding Natural Beauty and public health of the inevitable increase in pollution with Pm 10 and Pm 2.5's from diesel fumes from all vehicles. This is of particular concern for the parents in the CPs whose children are at schools in the area and especially those at schools close to congested roads such as Farlingaye and the A12.

The information below related specifically to the issue of travel to and from local schools as requested during the Open Floor Hearings by Mrs McKay.

Snape and Orford Primary schools have combined 114 pupils. 65 of these are from the combined parishes of: Butley, Capel St Andrew, Chillesford, Snape,

Sudbourne and Wantisden, plus the adjacent Parishes in the peninsula: Blaxhall, Iken and Orford.

They attract 49 pupils from outside of the catchment from the following Towns and parishes:

Aldeburgh, Aldringham, Boyton, Friston, Great Glenham, Hollesley, Kelsale, Leiston, Little Glenham, Rendlesham, Saxmundham, Sweffling, Ufford, Westleton and Wickham Market.

Of all the children who attend the schools 36 (31%) are assumed to walk (from Orford and Snape). 78 (68%) travel to school by car or bus. Only 5 pupils travel by official school transport to Orford school (4 from Sudbourne and 1 from Butley). Therefore, if it is assumed of 1.5 pupils per car then there are approx. 50 car journeys made to these schools twice a day (excluding staff etc).

When analysing the roads used (see analysis sheet) the key areas vulnerable to congestion include: 38.6% use the B1069 (Tunstall to A1094), 30.7% use or cross the A1094 (Friday Street to Aldeburgh), 12.3% who use the B1069 (A1094 to Leiston) and 6.1% who use the A12.

The catchment for these schools is widespread and therefore any disruption on the road network will not only affect the amount of time the pupils have to spend in cars, reduce the likelihood of visiting friends and activities that involve travel through congested areas but actually challenge the viability of these schools.

When pupils leave to secondary school's they then go to either Farlingaye (Woodbridge) or Alde Valley (Leiston), Saxmundham Free School, Thomas Mills (Framingham) or Brandeston. All of which involve lengthy travel on the local road network. Information has been requested from Suffolk County Council who provide the school bus service about the routes and pupil numbers. As of 1st June no information has yet been received.

Public Services

Members of our communities have consistently through the consultation process raised issues around the increased demand on all public services that will come with a major influx of additional people into the immediate area. The Community Impact Assessment Report May 2020 (PINS EN 010012) provides an assessment by EDF of those impacts on our communities and the

surrounding area and reflects the EDF view that there will be minimal impact on health service provision and community safety and appears to reflect a view that educational provision will have the capacity to respond to the increased workforce and the additional family members.

Our CPs remain concerned however, and in our view the demand on already overstretched primary and secondary health providers, the East of England Ambulance service, educational provision and policing resources will be significant and has not as yet been addressed in any detail. The overall view reflected in the report of minimal impact or even beneficial impact does not appear to be evidenced in the DCO material.

We have noted that in the DCO documentation the forecast peak of employees working at Sizewell has increased from 5500 to 8000 since the Stage 2 consultation and there are concerns that this will further increase and exacerbate an already heavy load on currently decreasing local public service provision. The Community Impact Report proposes the creation of a Public Service Contingency Fund, a Healthcare Planning Fund and Community Safety Management Plan amongst many outline proposals but given the lead in time for the project we feel it is reasonable to have received greater detail about how mitigation need will be assessed and delivered. For example policing capacity has been cut by approximately 20% in the last 10 years, primary and secondary health provision has remained at best static and in some cases educational provision has become more restricted so is highly likely to struggle with additional demands.

This aspect of potential impact on the area needs more focus given the complexity of the issues and potential detrimental impact on communities. It was noted that at the recent Preliminary Hearings both Suffolk Constabulary and the East of England Ambulance Services pointedly reflected concerns about the impact of the development on demand for their services that appear still unresolved. Given the period of consultation that has already passed it is surprising that there still appears to have been no concrete proposals to deal with that entirely predictable demand. It is also in our view significant that over the period of the consultation the large policing presence in Leiston has been reduced and the police station closed and sold. Similarly many of our public services had locally embedded bases in Suffolk and much of that infrastructure has been closed and “rationalised” in recent years making those

public services use the road networks and therefore vulnerable to the added congestion and potential gridlock.

The CPs noted there was reference to ongoing work in this area with partners but again there was a lack of detail in the DCO documents on what that might mean in terms of outcomes that would mitigate the extra demands on public services.

We should not forget that the development of Sizewell B brought with it additional policing and health demands which were arguably only recognised at a late stage and remain a legacy issue. It is a matter of record that over the period of the development of Sizewell B the policing of Leiston and the surrounding area was one of the most demanding in Suffolk.

Environment

The environment is crucially important for the residents of the area and the mainstay of our tourism businesses.

There are a number of outstanding natural habitats within the area, some adjacent to the proposed construction site, most notably the RSPB Minsmere Reserve and Minsmere Levels. We note the organisations responsible for these have warned of the detrimental impact to their habitats from the construction of SZC.

It is accepted that coastal erosion will be exacerbated by global warning, resulting in increased sea levels encroaching on the land mass. SZC is close to sea level so particularly sensitive to change in sea levels which enhances the risk of the development. These issues have already been referenced but also concern us.

Nuclear waste is a related issue. This is currently stored onsite despite a number of attempts by the government to find alternative storage arrangements. The waste from the proposed Sizewell C reactor will be stored on site for 160 years, a period for which estimates of sea level rises are very imprecise apart from the fact they will increase. By how much is uncertain which means onsite storage is a significant risk.

There are other environmental risks arising from the development. Air pollution being one. The increase in HGV traffic, even if mitigated by the tentative proposals about increased reliance on sea and rail transport will add to air pollution. To this must be added the increase in car and van transport for

which there is no alternative. Altogether this will result in greater air pollution, especially where there is greatest concentration, along the A12 and the roads into Sizewell.

A further issue of concern is light pollution. Reports from Hinckley Point identified that the site is being subjected to intense illumination for many hours. This is detrimental to people, animals and birds, disorientating them and disrupting sleep patterns.

Tourism

Tourism is a key element of the local East Suffolk economy. The East Suffolk Destination Management Organisation, a business group to promote tourism in the area, has estimated that tourism employs, directly or indirectly, 15% of people locally and accounts annually for a substantial figure of just under £700 million within the local economy, based on a recent study they commissioned. In response to questions, visitors valued the peace and tranquillity of the area. Most visitors cited nature related activities as the main reason for their visit.

The same study questioned visitors about the impact of the SZC construction. It found that the detrimental effect of the construction period, at least 10 years, would significantly reduce tourism. It estimated that for each year of the construction period, there could be a reduction of up to £40 million and a loss of 400 jobs.

There are three main drivers to this impact.

The first is the direct effect of the construction on major tourist destinations in the area. RSPB's Minsmere Nature Reserve is adjacent to the main construction site as is Suffolk Wildlife Trust's Minsmere Levels. Both these will suffer significant reduction in visitors as well as disturbance to wildlife. Dunwich, another popular destination is in sight line of the site and again is likely to suffer.

To illustrate, one of the most attractive routes to access Minsmere from these villages is to drive along the A12 and then take the road to Eastbridge, opposite Leiston Abbey. This is a single track road with passing spaces taking you into the village and then out across a narrow bridge with fields to the east which are often home to many geese and swans and then a track into the reserve along a sylvan route with a stream to the east.

Under the current proposals the first part of this route will take you through the main worker accommodation complex with three storey buildings alongside and vastly increased traffic, through the village where the quaintly names Eel's Foot Inn is the nearest pub to the worked complex so likely be attractive to the workers in significant numbers and the construction site is likely to drive away the many birds on the adjacent fields.

The second driver is the reduction in holiday accommodation. The example of Hinckley Point is that, rather than use the official worker accommodation, many workers rented holiday accommodation, as multi-occupancy dwellings as a group to reduce cost. This had a number of consequences. A reduction in availability of accommodation generally but also a related problem with parking as, rather than just one car at the accommodation, there would be several vehicles, creating parking problems. Finally, there is the increase in traffic as the individual workers drive to work, maybe to a park and ride site.

Finally the overall increase in traffic, making visiting the area unattractive. If the principal reason for visiting East Suffolk is peace and tranquillity as cited in the DMO report then being stuck in a traffic jam due to construction traffic is hardly conducive to a peace of mind and tranquillity.

Economic benefit

There have been significant reductions in the cost of renewable sources of energy, particularly wind farms in recent years. The UK is already benefitting from the success of these large scale, off shore wind farms which give economic benefits in terms of jobs and related activity to both Great Yarmouth and Lowestoft. These operations also provide "greener" electricity without creating the legacy impacts and CO2 emissions of SZC. Every £1 invested in SZC could be spent on cheaper, faster renewables, with investment in energy efficiency & storage, solar and tidal power, adaptions to the grid and even energy changes in our homes.

The Cp remain sceptical about the claims on economic benefit and the creation of jobs. For instance, it is noted that 1,500 new apprentice positions will be available. However, on a £20bn plus budget this is one per £130m of investment, this does not represent good value for money.

The proposed cost of nuclear power is high especially when the cost over runs clearly demonstrated from Hinckley Point are combined with the serious

adverse legacy to the area - the average life of a nuclear power station is only 56 years and currently all the similar nuclear projects are running behind schedule and over cost and are subject to some scepticism about their completion. It is possible therefore that this project represents “yesterday’s technology never”.

Additionally the plant will at some point have to be mothballed and future generations will have to fund the completely unknown clear up costs of spent nuclear fuel. Given all of that it is difficult to quantify any significant economic or other benefit for our communities.

Cumulative Impact of Sizewell/ SPR and related projects

Finally the CPs remains concerned that despite specifically and from an early stage asking for consideration of the potential cumulative impact of the SZC proposals taken together with the SPR DCO (now in addition National Grid) for infrastructure developments, that the sections on cumulative impact within the DCO documents holds minimal detail on the potential impact of concurrent development. The most obvious area of concern is that relating to the cumulative impact of the concurrent projects on traffic and transport issues. There can be little doubt that if both projects (potentially more) are approved then this will have major implications arguably over large parts of the County but particularly East Suffolk with its network of minor roads. Even routes such as the A12 and A1094 which are currently designated as routes for HGVs are designated through necessity rather than actual capacity and design. At a recent SPR hearing a SCC traffic specialist described some of the routes as, “the least-worst option”, for heavy traffic and declined to commit to the view that they were capable of supporting all the potential traffic from the projects.

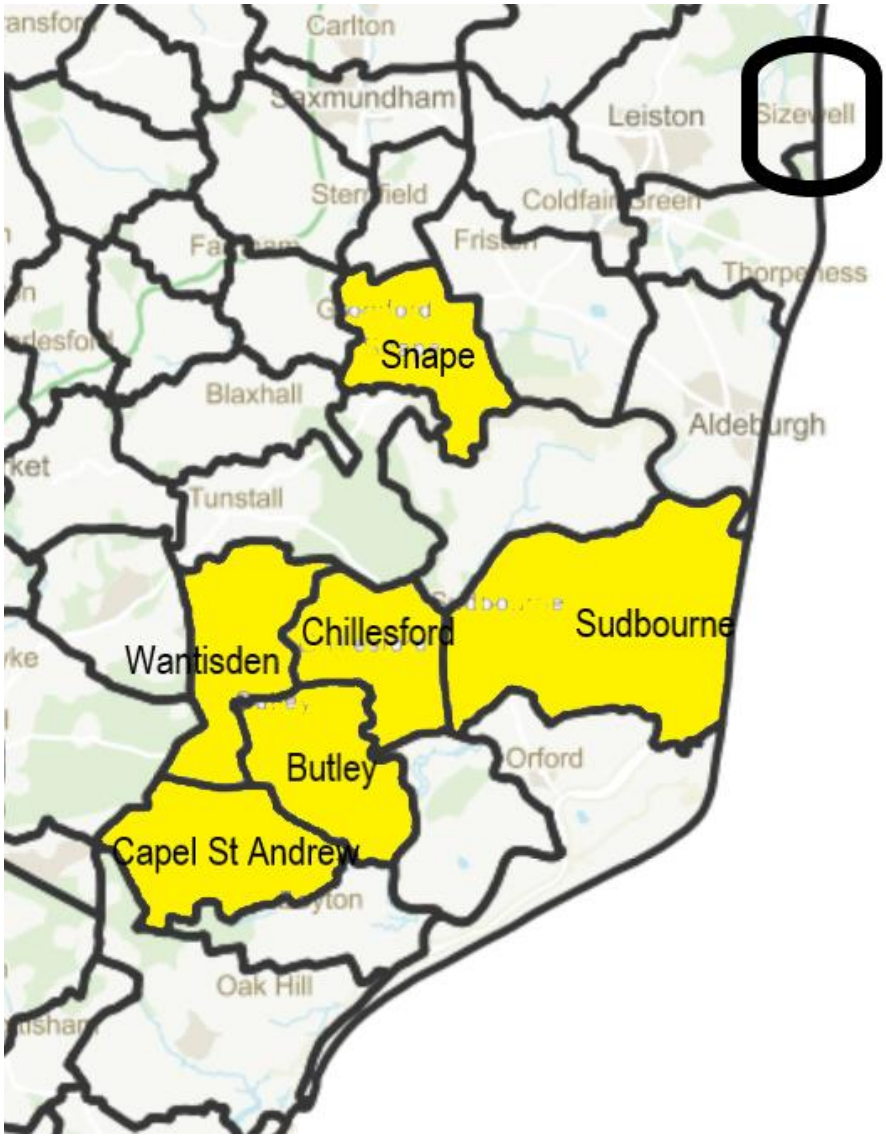
Other cumulative impacts are also significant in terms of air pollution, noise, impact on tourism, health and wellbeing and the provision of public services for at least a period of ten years and more. We attached a report by John Trapp that was submitted to the SPR DCO relating to the impact of additional traffic specifically on the A1094 and B1069 which is relevant to the SZC DCO in terms of impact of the overlapping projects on traffic across the wider area.

It is striking and that there is frequent reference to ongoing work on these particular issues and the need to continue it, but the issues remain unaddressed in any detail. The potentially damaging cumulative impact could

destroy, or at the very least significantly denude, the vital tourist and farming industries that the area depends on currently for employment. Again given the lead in times and the consistency of communities and others raising the issue it is concerning that we remain in the position we are.

Appendix 1

Combined Parish Location Map – Parishes participating in this response highlighted in yellow



SEAS representation on Roads/Traffic and Tourism

Cllr John Trapp
former Senior Lecturer in Applied Mathematics at The Open University
[redacted]

21 January 2021

1 Introduction

- Requested by SEAS to do some mathematical modelling on the effects of building the East Anglia Power Hub just north of Friston.
- Resident in Cambridgeshire, so no declaration of interest, although I know some people in the area.
- There is a need for an electricity collection and distribution site in East Suffolk, and the problem before us is where to locate it. The number of jobs created in East Suffolk is *independent* of the location.
- The A1094 is overwhelmingly the entry to, and exit from Aldeburgh and Thorpeness.
- A feature of the East Suffolk coast is that there is no coastal road, as for example on the North Norfolk coast, and in almost all locations one has to travel inland to the A12 and then coastward even if the locations are one mile from each other as the crow flies, but separated by a river. The map in Figure 1 on the following page shows access to Aldeburgh, primarily along the A1094; the map in Figure 2 on the next page shows the many access roads around Sheringham, North Norfolk, where a recent onshore distribution centre for an offshore wind farm was built.

2 Traffic on the A1094

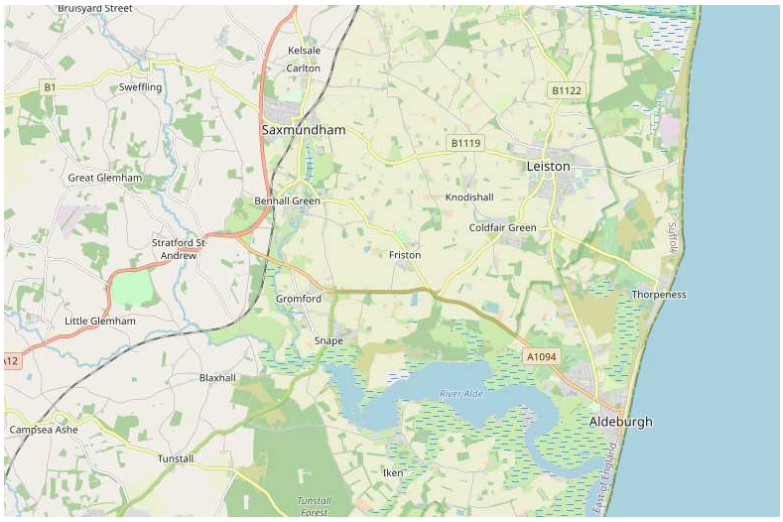
Some modelling of the current traffic density and an estimate of the additional traffic generated by the construction of the East Anglia Hub at Friston.

2.1 Data on present usage of vehicles on the A1094

I have been sent data recorded by the Speed Indicator Device (SID) at Green Heyes (on the A1094 between Friday Street and Snape Church) from Monday 31 August to Sunday 1 November 2020; the numbers recorded are for incoming traffic, i.e. going eastwards. I have chosen this location, as it is more indicative of the traffic coming from the A12 along the A1094; the other measuring points at Snape church and in the main road in Snape, the B1069, show similar data. The SID measures the passing of all vehicles, be they cars, vans, HGVs or tractors.

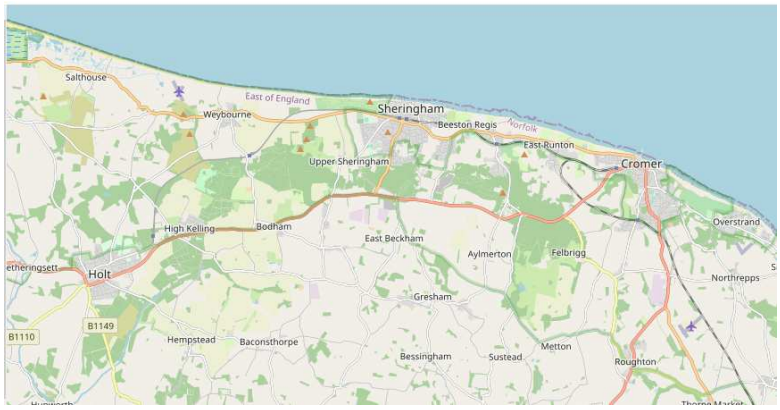
Note that these data are during the pandemic year, so may not be representative of normal years. However, the period observed is when there was a brief return to near-normality.

First, to illustrate the variability of traffic density from week to week, I have taken Sundays in September and Wednesdays in October as a representation. In all these traffic data graphs, the



The A1094 is the primary route into Aldeburgh whether one is travelling from north or south along the A12 (checked by satnav timings, the cross-country route northwards through Leiston is marginally slower than using the A1094, but this may depend on traffic conditions).

Figure 1: Access to Aldeburgh



There are two parallel coastal roads, A148 and A149, with many minor roads leading from one to the other – no shortage of access.

Figure 2: Access to Sheringham

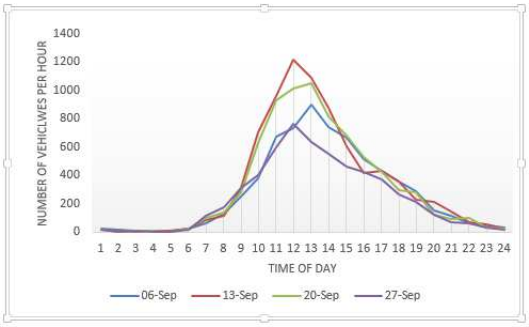


Figure 3: Traffic on September Sundays

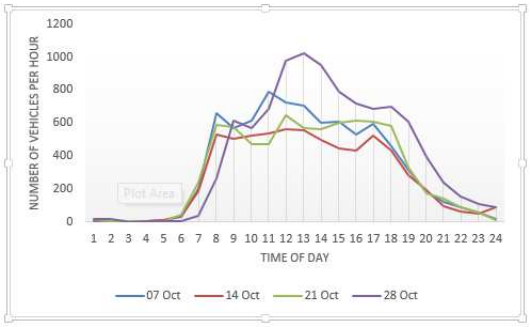


Figure 4: Traffic on October Wednesdays

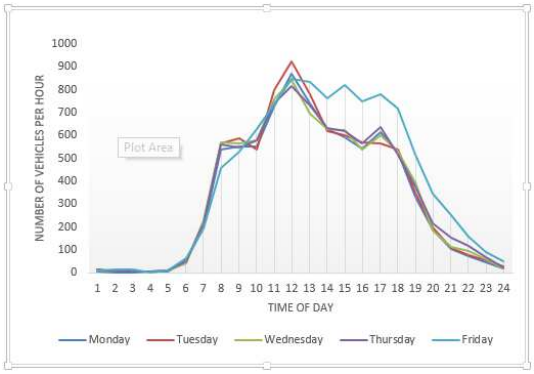


Figure 5: Average weekday traffic at Snape during September 2020

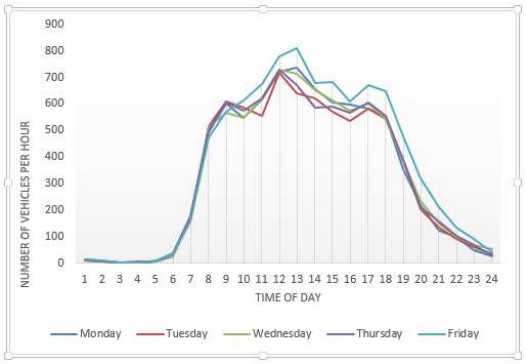


Figure 6: Average weekday traffic at Snape during October 2020

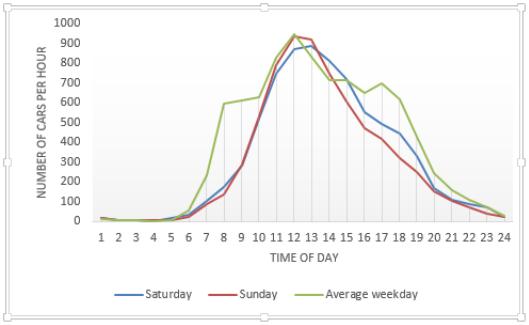


Figure 7: Average weekend traffic at Snape during September 2020 compared to the average weekday

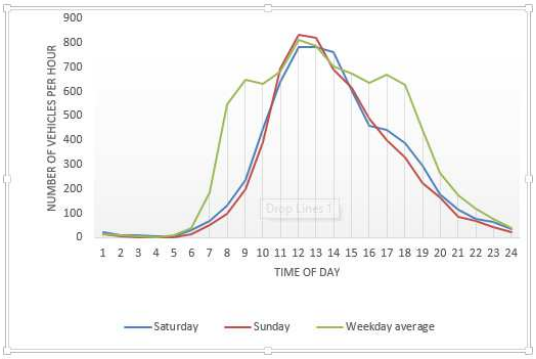


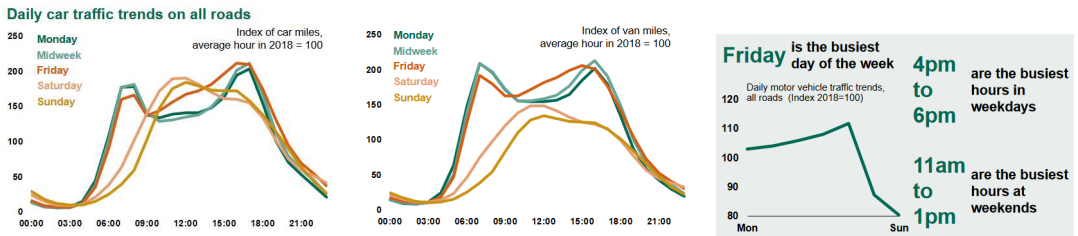
Figure 8: Average weekend traffic at Snape during October 2020 compared to the average weekday

values along the horizontal axis represent the end of the time period; e.g. for the point '11' the number of vehicles per hour is that recorded from ten to eleven o'clock in the morning.

Second, to illustrate variations during weekdays, Figures 5 and 6 show the daily traffic density for the weekdays averaged over the whole month.

Third, Figures 7 and 8 illustrate the daily traffic flow on Saturdays, Sundays and compare this to an average weekday for the months of September and October.

The daily traffic density values are confirmed by the Government website: `https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/808555/road-traffic-estimates-in-great-britain-2018.pdf` from which I have taken the graphs in Figure 9.



(a) Cars during the day (b) Vans during the day (c) Traffic during the week

Figure 9: Road traffic estimates from Government web-site

Statistics about temporal variation in traffic flow are compiled using data from DfTs network of automatic traffic counters (ATCs). ATCs count and classify vehicles passing over them 24 hours a day, on every day of the year, so are well suited to provide data on flow variation across a range of timescales.

There is a spread of values from one week to the next, but there are some general and significant observations to be made from the data:

1. Figures 3 on page 2 and 4 on page 2 show that there is considerable variability for the same days in the week over a period of a month; this may be due to good weather, or the staging of a popular event in Aldeburgh;
2. the averages for a day when taken over a month are remarkably similar to each other (see Figures 5 on the previous page and 6 on the preceding page);
3. for most weeks the traffic density on Friday afternoon (see Figures 5 on the previous page and 6 on the preceding page) is marginally the highest, which is the same for England as a whole (see Figure 9(c) on the previous page;
4. there is a marginal increase in traffic density corresponding to the conventional rush hours as shown in the UK data in Figure 9(a) on the preceding page and 9(b) on the previous page (the traffic due to HGVs is even more marked to drop off during the weekend than for vans), but
5. throughout the week there is a peak in the late morning, not during the conventional rush hours;
6. Saturday and Sunday traffic is about the same as traffic on weekdays, apart from the morning and afternoon rush hours; this is different to the norm for England as a whole as seen in Figure 9(c) on the preceding page;
7. the highest hourly rate recorded during this period is 1,222 vehicles per hour;
8. the highest recorded speed was 95 mph, in a 30 mph speed limit area; the average speed was 32 mph (not relevant to the argument, but an interesting fact);
9. the average traffic density on a weekday is 600 vehicles per hour from eight in the morning to eight o'clock at night.

Note the non-zero origin on the graph in Figure 9(c)

Conclusions from the data are:

1. At peak periods the traffic is very heavy — 1200 vehicles per hour is equivalent to one vehicle every 3 seconds, and at 30 mph, there will be a distance of approximately 40 m between vehicles; this is not nose to tail, but almost, and rarely giving an opportunity to do a right-hand turn from a side road onto the main road;
2. there is confirmation that this road is used for leisure — the distribution of traffic density peaks around late morning, not two peaks (for the two rush-hours which is the norm for the country); there is evidence that there are morning and afternoon rush hours on weekdays, but this is swamped by the leisure traffic;
3. the traffic density fluctuations from day to day and week to week indicate casual, not routine, travel for leisure.

The 2-second rule has been devised to maintain a safety margin for peak flow traffic, and the peak flow measured in these data is not so far off.

2.2 Construction Vehicle Movement Modelling assumptions

1. Estimate of 300 HGVs a day leaving and entering the construction site,
2. over a period of 12 hours;

3. besides the HGVs, there will also be other vehicles (cars and goods vehicles) travelling to the site, but there is no assessment of how many there will be;

4. not considering the transport of four (or six if scaled up from data on Blackhillock site, let alone the requirements for all the other enhancements such as Nautilus, Eurolink, Galloper, etc.) 254 ton transformers on 50-metre-long transporters that will require road closure to strengthen bridges and roads, rounding of bends to accommodate the length of the convoy, besides the actual transportation at 5 mph (there are very good videos on YouTube of the transport of these transformers — just search for '*245t transformer*' or see a specific one on `https://www.youtube.com/watch?v=GjPWZH_-FYg`).

Conclusions from this data:

1. one HGV every 2.4 minutes, in one direction, and the same returning having unloaded;

2. the extra HGV construction traffic is about one-tenth of the average traffic density;

3. there is no estimate of the construction traffic generated by smaller vans and cars; is there an assumption that the Park and Ride sites will provide parking for all the workers, and that they will be bussed to the construction site from these Park and Ride sites each day? there is mention of a caravan park for workers — where will it be located? this needs to be explored, since this traffic may well be more than the road can bear;

4. no modelling of the traffic slowing down behind HGVs turning left onto the Friston Road from the A1094, nor at the right turn from the A12 onto the A1094;

5. travelling from Snape to Aldeburgh, requiring access from the B1069 onto the A1094 at the junction by Snape church, will be even more problematic.

The additional construction traffic will affect travel times along the A1094, and become a deterrence to tourists; given that the average stay is of 3 nights, comprising both weekend and weeklong stays, any detriment to travel will deter some visitors, for which there is evidence in the next section.

3 Employment in Aldeburgh, Leiston, Thorpeness and smaller habitations

There is very little industry in the area served by the A1094; most of the employment is services and tourism; based on both anecdotal evidence and the lack of rush-hour traffic.

3.1 Effect on Tourism Modelling Assumptions

Sources are:

[I] Tourism: jobs and growth, a report from Deloitte, November 2013;
`https://www.visitbritain.org/sites/default/files/vb-corporate/Documents-Library/documents/Tourism_Jobs_and_Growth_2013.pdf`

[II] UK Tourism Statistics 2019:
`https://www.tourismalliance.com/downloads/TA_408_435.pdf`

[III] The Energy Coast:
`https://www.thesuffolkcoast.co.uk/shares/The-Energy-Coast-BVA-BDRC-Final-Report-2019.pdf`;

[IV] `https://themovemarket.com/area/employmentclassification/leiston-suffolk-coastal/suffolk-coastal-004c`, . . . `-004d`, . . . `-004e`

Some data from these sources (with references to the above numbered sources in brackets); where different sources have given different values, I have taken the one with lesser impact :

1. every £54,000 spent by tourists generates a job, and the converse should hold as well ([I] page 3);
2. the multiplier effect of employees generating more employment due to their spending locally, with a value of about 2, so every job generated (or lost) in tourism engenders (or curtails) another job ([I] page 28);
3. average spend per residential visitor from the UK is £257 in a seaside or coastal location ([II] page 5);
4. the average length of stay is 3.1 nights ([II] page 5); since this is both for week-long (seven days) and weekend (two days) stays, the conclusion is that most stays are for weekends;
5. tourism businesses have 39% of their staff aged under 30, compared to an average of 21% for other businesses; with many older people in the area, this provides a better age spread in the district and employment for younger people ([II] page 7);
6. the average spend per day visitor is £22 ([II] page 5);
7. the Suffolk Coast has a lot of repeat visitors who come regularly ([III] page 15);
8. based on a survey of visitors, it is estimated that the potential net annual loss during the construction phase is £24,000,000 for the whole of the Suffolk Coast, approximately a reduction by 15% ([III] page 39);
9. estimated (conservatively) that the potential net annual loss after the construction phase is about £20,000,000 ([III] page 41);
10. employment in Leiston, for example, is quite buoyant, with less unemployment than the East of England as a whole ([IV] averaging out all three areas in Leiston).

3.2 Conclusions from the data

The figures above are for the whole Suffolk Coast; a reasonable assumption would be that the major impact, at least half, would be on the stretch of coast between Aldeburgh to Sizewell for which the total loss of income from tourism over the 15 years of construction is about £360,000,000. This sum is not insignificant compared to the cost of the whole project, and it is highly significant for the area with threat of any temporary loss being a permanent legacy.

The estimate is over 440 job losses (12,000,000/54,000 with a multiplier of 2) in Aldeburgh, Leiston and Thorpeness area during the construction phase; it could be followed by a possible resurgence of employment by 70 after all the construction has finished.

Although employment in the Aldeburgh, Leiston, and Thorpeness area is buoyant, albeit somewhat directly and indirectly (the multiplier effect) dependent on the thriving and successful (but volatile and mercurial) tourist industry, there are indications (from evidence that more benefits are claimed) that unemployment is rising possibly in consequence of the loss of visitors during the 2020 pandemic year. There is also anecdotal evidence that part-time work, which for many households is attractive, is becoming even less part-time; such shortfall will not be recorded in official statistics.

One of the attractions of Aldeburgh is the diversity of shops, activities and refreshment facilities, catering for a range of tastes and purses; it is the variety and diversity, besides the attractiveness of the seafront, that tempts visitors to return. Examples of the diversity that the Aldeburgh region offers includes Festivals (Literary, Food and Drink, Documentary Film, Music, Poetry, Art etc.), ornithologists, ramblers, cyclists, botanists, sailors, golfers, swimmers, joggers, canoeists, fishermen, kite flyers, kite surfers, along with family bucket and spade holiday makers, couples looking for romantic breaks, etc.

How many tourist venues, shops and refreshment venues will survive this Covid year is not clear, but the impending downturn of visitors forecast because of the construction phase may well persuade some outlets to close; if spending outlets close from having fewer visitors during the construction phase, it is unlikely that they will reinstitute themselves later. The town will be less diverse in its offerings to visitors, and so less attractive.

4 Modelling Cost to Residential and Business

There have been some studies on the costs incurred through roadworks or infrastructure construction to established businesses. Here is a selected list, but many others will be found through internet searches:

[I] `https://www.acs.org.uk/advice/roadworks` gives an example of a village shop losing 10% of its custom and profit through months-long roadworks affecting access to the shop.

[II] `https://researchbriefings.files.parliament.uk/documents/SN00200/SN00200.pdf` gives a brief summary of possible compensation for construction work, and in summary:

- No compensation for loss of trade due to road works;
- the compensation from works undertaken by a utility company is enshrined in the legislation drawn up when each was privatised, and compensation is only payable where the relevant statute authorises it;
- compensation can be claimed if a new highway affects a property value depreciation.

As far as I can judge there is no compensation for a new infrastructure project such as this.

[III] `file:///C:/Users/JOHN~1.TRA/AppData/Local/Temp/The_Effect_of_Road_Traffic_on_Residential_Property.pdf` is a study on the effect of Road Traffic on Residential Property Values that argues that noise increase is a good marker for determining compensation for new road traffic.

[IV] `https://www.sciencedirect.com/science/article/pii/S1877050917309584` is an interesting article in which the authors discuss the financial implications of Accelerated Bridge Construction compared to conventional bridge construction. They produce a model that quantifies the financial penalty per day for delays due to construction; their conclusion is that a more expensive bridge that reduces the construction phase is overwhelmingly more economic for the whole area than a cheaper, conventional bridge. The interesting part is that they model the economics of delay to traffic flow, and other considerations.

Losses due to construction can be quantified, and incorporated in any proposal for an infrastructure project.

5 Other qualitative observations

- Having watched the YouTube video of a 245t transformer travelling through France on its convoy of length 50 m, I am surprised that it is conceived possible to transport these transformers to north of Friston without altering the roundabouts on the A12, around Woodbridge in particular, and the right turn from the A12 to the A1094, and from the A1094 to the country lane to Friston; has an evaluation of the transportation been considered in detail?
- It is ironic that the construction of a green energy site is so dependent on very many HGVs travelling across the countryside, and wonder whether the cost of such transport has been factored in. Using a site nearer the source of the materials would be more efficient, less disruptive and less expensive.

- Similarly, the site at Friston necessitates the creation of two Park and Ride sites, and their eventual dissolution; hardly an energy efficient operation, and an extra cost.
- Not only will the A1094 be laden with goods vehicles, but also the A12.
- One can't help but notice the existence of a freight line from Saxmundham to Leiston, and thence onto Sizewell.

6 Conclusions

1. Every community in East Suffolk will be saying why the East Anglia Hub should not be in its vicinity, but a site has to be chosen that minimises the disruption to the community over its construction phase and is not too costly.
2. My experience as a District Councillor on the Planning Committee is that planning decisions are based on the evidence in front of the committee, and that the committee is not able to decide between various alternatives or make suggestions; this may be different for an ISH, and it may have powers to give partial planning permission, accepting the offshore construction, but asking for a re-assessment of the onshore location (or vice-versa).
3. The A1094 road is the primary artery to communities whose main income is from casual, but intense, tourism that is the mainstay of the local economy, as well as used by farm traffic with farms along its entire length from the A12 to Aldeburgh;
4. The A1094 is near to capacity for some periods of the day, and that the addition of slow-accelerating HGVs will impact on the traffic, leading to avoidance of the road by casual and volatile users.
5. Over the construction period it is estimated that job losses in Aldeburgh, Leiston and Thorpeness will be of the region of 440, and that this particular region will lose more than £180,000,000. Other locations in East Suffolk may lead to a loss of jobs and business, but not to the extent that will be incurred by the region served by the A1094 since it is the main access route to a primary tourist destination.
6. Section 4 on the previous page refers to studies on losses sustained from infrastructure projects. This loss should be factored in when deciding the location of the site, together with the extra cost of so many HGVs bringing materials far from their source, the cost of construction (and subsequent demolition) of the Park and Ride sites, the changes to the road layout to accommodate the transport of the massive transformers, the extra traffic from employees' cars and smaller delivery vehicles.
7. When comparison is made to a previous and seemingly similar construction project, the similarity and differences must be evaluated objectively, and with reference to the actual features in the two projects, not the final infrastructure.