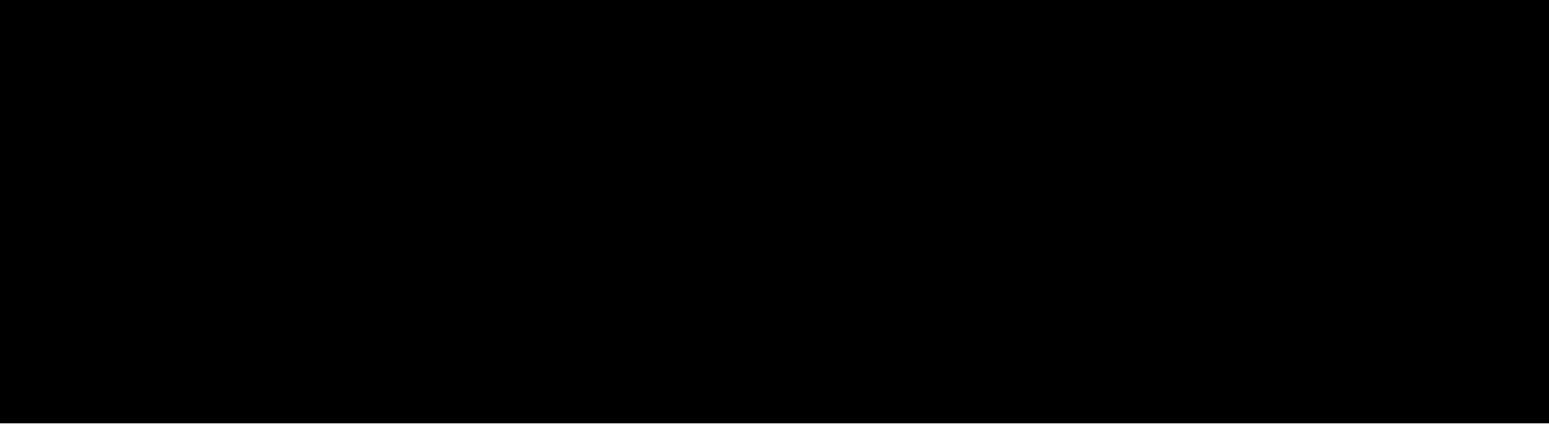




From: Pagham Parish Council 

Sent: 22 May 2017 10:55

To: Planning.Responses

Subject: Pagham responses

Please find attached the comments of Pagham Parish Council in respect of planning application P/140/16/OUT.

Kind regards



Nicola Jones
Clerk & RFO
Pagham Parish Council



Pagham Parish Council

P/140/16/OUT Outline application for access only - mixed use development comprising of up to 400 dwellings, a care home with up to 70 beds, a Local Centre comprising up to 2000sqm of A1/A2/A3/D1/sui generis floorspace, provision of land for a 1FE primary school (with sufficient space to ensure that it is expandable to 2FE), provision of land for a scout hut, safeguarding of land to help link the site to the Pagham Harbour Cycle Route & other community uses including public open space & allotments with some matters reserved. Land South of Summer Lane & West of Pagham Road Pagham

May 2017

Pagham Parish Council has considered application P/140/16/OUT and wishes to OBJECT on the following grounds that this application does not meet the tests set out in NPPF regarding delivering sustainable development for the following reasons:

Theme 1: Building a strong, competitive economy:

Para 21:

"In drawing up Local Plans, local planning authorities should

- Set out a clear economic vision and strategy for their area which positively and proactively encourages sustainable economic growth*

....

- Support existing business sectors, taking account of whether they are expanding or contracting and, where possible, identify and plan for new or emerging sectors likely to locate in their area.*

The applicant has not provided any information related to the economic impact that this development would have on the area, either during the development phase or ongoing. The lack of information in this area is significant as it is considered that this development is likely to have a considerable negative impact on the two major industries in the area – tourism and agriculture.

- This development if approved would have a major negative impact on the attractiveness of the area for tourism, both during the construction phase and after completion, as it will be very detrimental to the semi rural character which makes the existing village and attractive and popular tourist destination.
- Tourism makes a huge financial contribution to the local economy, not only to Pagham but also to surrounding towns such as Bognor. The owners of the large Church Farm holiday village are most concerned that this and the two associated developments would have a major negative impact on their business and the number of visitors coming to this part of West Sussex.
- The loss of a significant amount of prime agricultural land would have a major negative impact on the other main local industry - farming. This land is part of an established farming district which is very productive and has become a centre for growing, harvesting, packing and distribution of good quality home grown produce. As well as the consequential loss of important food production there would unavoidably be less work for the many agricultural workers currently employed in production and distribution of produce.
- There is very limited employment available locally within Pagham or the surrounding area, except for jobs relating to tourism and agriculture. Hence building housing stock of the type proposed which has a large proportion of houses and flats suitable for working singles and families would create an unavoidable need to travel outside the area on a daily basis. As there is no railway station in Pagham this would mean further road congestion, especially accessing the A27 and Chichester which is already categorised as operating 'over capacity'.
- Any potential economic benefits from employment during the construction phase would be short lived and in no way can these been seen as supporting sustainable economic growth in Pagham - which is a key requirement of NPPF.

- The only possible long term economic benefit that might materialise relates to possible employment at a new primary school. However despite a site for a primary school being included in one of the possible site layouts it is only the land that the developer would provide – and there is currently no committed funding from West Sussex C.C. to build, staff and operate an additional school. Without this funding being available it is most unlikely that a school would be built, and more than likely that additional houses would be substituted.
- The proposal also mentions provision of 'health facilities' in the community hub, but in fact there is already a doctors surgery building close by in Pagham which is only open on a part time basis because there are insufficient medical staff to open it permanently. Hence without the necessary staffing the offer of having another building is of no value.

Please see Appendix 1a and 1b for further detail and explanations of our objections relating to the failure of this application to support the building of a strong, competitive economy

Theme 3. Supporting a prosperous rural economy

Paragraph 28

28. Planning policies should support economic growth in rural areas in order to create jobs and prosperity by taking a positive approach to sustainable new development. To promote a strong rural economy, local and neighborhood plans should:

- *support the sustainable growth and expansion of all types of business and enterprise in rural areas, both through conversion of existing buildings and well-designed new buildings*
 - *promote the development and diversification of agricultural and other land-based rural businesses*
 - *Support sustainable rural tourism and leisure developments that benefit businesses in rural areas, communities and visitors, and which respect the character of the countryside. This should include supporting the provision and expansion of tourist and visitor facilities in appropriate locations where identified needs are not met by existing facilities in rural service centers*
 - *promote the retention and development of local services and community facilities in villages, such as local shops, meeting places, sports venues, cultural buildings, public houses and places of worship.*
-
- Removal of grade 1 & 2 agricultural land from production to build houses inappropriate
 - Redundant and obsolete buildings not investigated for the opportunities they could provide including brownfield sites such as farm yards
 - Type of housing proposed is not affordable to agricultural workers who are often low paid.
 - Businesses which service existing large agri-business should be encouraged to develop and expand in the Parish
 - Destruction of qualities which attract tourists will damage tourism opportunities and economy

See Appendix 2 for further details

Theme 4 – Promoting sustainable transport

Para 32: All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

- the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- safe and suitable access to the site can be achieved for all people; and
- improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.

Traffic congestion and Infrastructure Issues

The impact on the road network, specifically the Pagham Road, has been considered by the Council

- Pagham Road is the single access for the community to the strategic road network
- Drainage of the road has always been a problem
- Dangerous – vehicles leave the road and proximity of farm works in field is a concern.
- Significant number of HGV transit journeys upon Pagham Road, together with massive tractor/trailer loads of crop waste to serve the generating system. Consent has already been given for expansion of this business.
- Cyclists – road is unsafe.
- Concern over safety of junction Lower Bognor Road and Pagham Road

See Appendix 3a for detailed comment

Key Findings from Traffic Survey Commissioned by Pagham Parish Council

Pagham Parish Council commissioned an independent traffic analysis from a specialist transport consultancy (2020 Consultancy) in order to obtain objective evidence of the significant problems already affecting road transportation in the area. The key findings from this survey (undertaken using automated measuring equipment and done at a relatively quiet time of year when there was little tourism related traffic) are as follows.

- Although the main access road from the village (Pagham Road) is relatively uncongested where it leaves the village, at peak times the volumes are swelled by traffic coming from west Bognor and joining by junctions with Sefton Road and the Lower

Bognor Road. These result in significant tailbacks, both for joining traffic and then for all traffic on the B2166 in the Runcton and North Mundham area.

- Only some 40% of the measured peak hour traffic attempting to reach Chichester and the A27 comes from Pagham village itself, the majority originating from Aldwick and Bognor direction (where this development would be sited). This reflects the fact that, although there is little local employment in Pagham, a high proportion of existing residents are elderly/retired and do not need to travel to work on a daily basis. In contrast these proposed developments would attract mainly families and individuals of working age so there would result in a disproportionate increase in peak traffic volumes.
- Congestion in peak hours on traffic approaching the Whyke Roundabout on the A27 south of Chichester (measuring Site 1) is very significant, with over 90% of vehicles measured travelling at low speeds which indicate slow and queuing traffic. Highways England have independently identified this junction as “severely congested”.
- Westbound traffic on the B1266 approaching the junction with the B1245 (where the traffic merges with traffic from Selsey) was also significantly congested in peak hours with slow and queuing traffic measured.
- Although the traffic leaving the B1245 prior to this by turning north onto the Vinnetrow Road was not measured this will ultimately join the A27 at the Bognor Road roundabout, and it is well known that significant traffic queuing occurs all the time at this junction, even in non-peak hours.
- Although the majority of congestion recorded affects northbound traffic, the section of Pagham Road above the junction with the Lower Bognor Road recorded the highest peak hour traffic volumes. This can be interpreted as reflecting the fact that actual traffic volumes could be significantly higher than those measured were it not for the congestion affecting northbound routes.
- As Pagham is a significant area for tourism the volumes measured would be expected to be significantly higher if the measurements were taken in the summer period. In particular the Church Farm holiday village has the potential to generate many hundreds of additional daily vehicle movements when fully open.

The consultants have considered the possible impacts of this development alongside the other 2 major developments ‘masterminded’ by Arun District Council (Hook Lane and South of Summer Lane). They have concluded that the proposed development sites will have a substantial impact on the wider local road network and strategic road network (rather than the immediate local road network) and that it is crucial the entire road network is considered when determining the impact of this application.

They identified that one of the major reasons for the existing congestion on the B2145 is due to the congestion experienced on the A27 by-pass during peak periods. This level of traffic creates difficulties for traffic to exit the B2145 safely. Therefore the proposed developments would significantly impact a strategic route which is already operating over capacity– and plans for improving the A27 have now been dropped for the foreseeable future.

Please see Appendix 3b for full details of our Consultants Report

Theme 6: Deliver a wide choice of high quality homes:

Para 50: To deliver a wide choice of high quality homes, widen opportunities for home ownership and create sustainable, inclusive and mixed communities, local planning authorities should

- *Identify the size, type, tenure and range of housing that is required in particular locations, reflecting local demand*

The type and density of housing described in this application are completely at odds with the existing character of the area and do not reflect the local needs as clearly identified in the Pagham Neighbourhood Plan and also the existing Village Design Statement.

1. Providing suitable housing for the ageing population is seen as one of the key housing challenges nationally. Despite this nearly half of the proposed home types are larger 2 storey family homes which are unsuitable for this type of older resident. Additionally it appears that only one of the 400 homes will be fully wheelchair accessible, which would again prohibit occupation by many elderly people.
2. The detailed survey carried out as part of the preparation of the Pagham Neighbourhood plan clearly identified bungalows as the type of new property most needed in the area. Although there is a brief mention of the “potential for single and 1.5 storey bungalows to be provided on the eastern edge dependant on the demand” the site plans provided show that the vast majority of properties on the eastern edges are larger 3 and 4 bedroom properties, so are unlikely to be substituted with smaller bungalows..
3. Historically there has been very little demand for 4 bedroom homes in the area, especially those built recently on relatively smaller plots, as would be the case with this proposal.
4. The Pagham Village Design Statement specifies that any development along Pagham Road should ensure that “front boundaries should contribute to the overall street scene”. However the plans provided show that most houses facing towards Pagham Road would be situated on an internal service road within the estate rather than fronting on to Pagham Road itself as per existing properties. This would dramatically change the street scene for the worse.
5. The village design statement also requires that any development should ‘Preserve views over open land to the west of Pagham Road’. These views would be completely lost with the very large development of houses, flats and shops that are proposed in this application.

Please see Appendix 4 for further details

Theme 10: Meeting the challenge of climate change, flooding and coastal change

Para 100: "Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere. Local Plans should be supported by a Strategic Flood Risk Assessment and develop policies to manage flood risk from all sources, taking account of advice from the Environment Agency and other relevant flood risk management bodies, such as lead local flood authorities and internal drainage boards. Local Plans should apply a sequential, risk based approach to the location for development to avoid where possible flood risk to people and property and manage any residual risk...."

102.

If, following application of the Sequential Test, it is not possible, consistent with wider sustainability objectives, for the development to be located in zones with a lower probability of flooding, the Exception Test can be applied if appropriate. For the Exception Test to be passed:

- it must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk, informed by a Strategic Flood Risk Assessment where one has been prepared; and*
- a site-specific flood risk assessment must demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall. Both elements of the test will have to be passed for development to be allocated or permitted.*

103.

When determining planning applications, local planning authorities should ensure flood risk is not increased elsewhere and only consider development appropriate in areas at risk of flooding where, informed by a site-specific flood risk assessment following the Sequential Test, and if required the Exception Test, it can be demonstrated that:

- within the site, the most vulnerable development is located in areas of lowest flood risk unless there are overriding reasons to prefer a different location; and*
- development is appropriately flood resilient and resistant, including safe access and escape routes where required, and that any residual risk can be safely managed, including by emergency planning; and it gives priority to the use of sustainable drainage systems.*

It is considered that the Flood Risk Assessment and Drainage Strategy prepared by MJA is seriously flawed as there are several parts which are either incorrect or misleading.

To summarise

1. The report fails to fully consider the potential groundwater levels. An assessment during wet winter periods needs to be undertaken and cross referenced to the groundwater levels at Chilgrove monitored by the Environment Agency.
2. The report places a heavy reliance on both the culverts and on-site/downstream being capable of receiving surface water flows from the development but no detailed analysis has been undertaken to confirm this.
3. The allowable surface water discharge should be based on the developable area of and not for the whole site.

4. The FRA makes comments which are considered by us to be inaccurate and misleading. Eg Standard of protection offered by the sea defences

5. A full hydrological assessment should be undertaken on all the ordinary watercourses on/adjacent to the site to assess their capacities, direction of flows and existing culverted restrictions

6. The Existing Sewage Treatment Works is currently unable to cope with existing flows so will not be able to receive flows from this development unless major improvement works are undertaken. These need to be identified at the outset before any application is determined.

Based on the above comments the Parish Council is of the opinion that further work is required to substantiate the conclusions reached in the FRA and without this information the application must be rejected.

Attention is also drawn to the comments of Pagham Parish Council's tree warden, Cllr David Huntley *B.Sc. Horticulture, lecturer in Arboricultural Science*

The soil is London clay which contains a high proportion of sand and silt making it very liable to solifluction in periods of high rainfall and destructuring as occurs in a building site. The artesian chalk and gravel aquifers underneath exploited by local farms and nurseries are likely to form overland streams causing a flooding problem in Aldwick and Pagham flooding local houses and blocking the Pagham Road (as happened in 2001 and in June 2014 – to quote just a few of the many occasions).

When flooding and high rainfall occur, the Summer Lane sewage works is overwhelmed and raw sewage is discharged into Pagham Harbour Local Nature Reserve. This occurred 55 times in last 6 years (since 2011). Swales and ponds do not solve the problem they merely delay it for a few hours. Tapping into existing drains is insufficient (SUDS – sustainable urban drainage). Building 80 houses in this site (and 400 south of Summer Lane) covering a large proportion of these fields in concrete is not going to help.

Paragraph 108 of NPPF: - 'Local Authorities should ensure developments are not limited in life by coastal change.' The gravel aquifers connect to the sea and only permit drainage at low tide. It is also worth pointing out that much of the site is only 4 metres above O.D. Newlyn which means that it could flood in the future with sea level rise and a bad storm surge coming up the river.

Please see Appendix 5 for detailed comments

Theme 11: Conserving and enhancing the natural environment

Para 109: The planning system should contribute to and enhance the natural and local environment by: • protecting and enhancing valued landscapes, geological conservation interests and soils;

- *recognising the wider benefits of ecosystem services;*
- *minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*
- *preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability;*

Para 117: To minimise impacts on biodiversity and geodiversity, planning policies should:

- *plan for biodiversity at a landscape-scale across local authority boundaries;*

Para 118: When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

6. *planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss;*

Paragraph 109 protecting valued landscapes and soils - minimising impacts on biodiversity – remediating derelict land, other relevant paragraphs contraindicating this development are:

-	
110	Land should be allocated with least environmental or amenity value.
112	Use only poor agricultural land
114	Maintain character of undeveloped coast
117,118	Take account of wildlife corridors and impact on areas designated SSSI,
SPA,	Ramsar, and SPC, mainly found in and surrounding
Pagham harbour.	
120	Unacceptable risks of pollution

In the light of the above and the closeness of the site to Pagham Harbour SPA and RAMSAR reserve why was not an appropriate EIA Environmental Impact Assessment) carried out?

Wildlife and ecology reports:

- Studies commissioned by Pagham Parish Council identify presence of protected species
- Development will affect foraging and nesting habitat
- Sites confirmed as particularly sensitive and individual and cumulative effects of development will have a serious negative effect on wildlife, biodiversity and special habitats.

See Appendix 6a & 6b for full details

Appendix 1a – Comments on Theme 1 (Building a strong competitive economy)

- Pagham is a well established tourist destination, partly because of its attractive seaside location combined with a rural landscape and historic village. There is a very large holiday complex at Church Farm which has hundreds of holiday homes, a large indoor swimming pool and golf course and which brings in many thousands of visitors each year. Inbound tourism makes a huge financial contribution to the local economy, not only to Pagham but also to Bognor, Chichester and other nearby towns and villages. If this application was to go ahead, especially if combined with the two other major developments at Hook Lane and Sefter Road (which is Arun District Council's objective), then the negative impact on tourism is likely to be very significant.
- This site is adjacent to and highly visible from the most used route down into the village by visitors (i.e. Pagham Road) by which the majority of tourists travel down into the area from Chichester and the A27. The sight of such large housing developments surrounding the village would be hugely detrimental to the initial impressions of what is currently an attractive semi-rural tourist area, with rustic features such as the windmill at Mill Farm. Visitors would also have to share this route during the building phase with heavy vehicles from the construction traffic, further undermining the attractiveness to tourists.
- If the area is made less attractive to tourists then there would be a significant loss of local jobs, and reduced incoming spend from those coming into Arun from other areas (especially London and surrounds) for leisure and tourism reasons. The owners of the Church Farm holiday village are very concerned that this and the two associated developments would have a major negative impact on their business and is likely to significantly reduce visitor numbers to this part of West Sussex (see attached letter).
- Another local attraction that brings in significant numbers of visitors is the Pagham Harbour Nature Reserve, managed by the RSPB. This nature reserve is a designated Site of Special Scientific Interest and RAMSAR site and so also attracts many other types of visitors. Again the visual changes to the village environment can only have a negative impact on the visitor numbers.
- A good demonstration of the positive contribution from current tourism levels is that although it is a relatively small village Pagham has four long established very successful high quality public houses with full restaurant facilities that are well used throughout the year, not just in the summer tourist season.
- The loss of prime agricultural land would also have significant negative impact on the other main local industry - farming. As well as the obvious loss of crop production from this high grade agricultural land (which benefits from one of the highest rates of sunshine hours anywhere in the UK) there would unavoidably be less work for the many agricultural workers involved in production and distribution of produce. The supply of home produced food products is increasingly important because the increased global demand for food products from major developing countries such as China means we must reduce our reliance on imported food products.
- There is little local employment available locally except for a limited number of well filled jobs relating to tourism and agriculture. Hence building housing stock for families and younger people as proposed would create an unavoidable need to travel outside the area on a daily basis for those of a working age. There is no railway station in Pagham which means that initial travel by car or bus would be essential for almost all the new residents of this development commuting to work. This would put substantial additional strain on the local roads which are already heavily congested at peak times – as

evidenced both by recent traffic surveys and by Highways England themselves. As the existing population contains a very high proportion of retired residents the need for rush hour travel is currently significantly lower than would be normal for a population of this size. Despite this there are major delays and congestion on the major northerly and western routes out of the village as evidenced by recent traffic surveys and confirmed by Highways England themselves.

- Any potential economic benefits from employment during the construction phase would be short lived and in no way can these been seen as supporting sustainable economic growth in Pagham - which is a key requirement of NPPF. Given the shortage of local labour with the appropriate skills this work is almost certain to be undertaken by contractors brought in from outside the area for the duration of the build. Apart from day to day subsistence spend it is likely that the large majority of this income will go back to their home areas or countries and not significantly benefit the local economy.
- The only potential tangible long term (i.e. sustainable) benefit relates to employment of staff at a new primary school should one be built within this development. However this seems unlikely to materialise as although there is possible provision for the site for a school the developers are not proposing to provide for any funding of the building of the school itself, and there is as yet no commitment from West Sussex county council for constructing and running a school within this development.
- The proposal also mentions provision of 'health facilities' such as a doctors surgery or similar. However there is already a doctors surgery building close by in Pagham operated by the main Grove House surgery from Rose Green, which is the major GP's surgery for Aldwick and Pagham. Although this is a large practice with several doctors it is often seen to be struggling with local demand and getting an appointment can often take days or even weeks. The Pagham surgery premises are in facts only open on a part time basis because there are insufficient medical staff to man it permanently. Hence in the absence of suitably trained additional staff being available the option of having another building to house a surgery is of no value.

Appendix 1b – Letter from Church Farm re impact on tourism.

Ray Radmall
Pagham Parish Council
The Village Hall
Pagham Road
Bognor Regis
PO21 4NJ



Church Farm Holiday Village
Church Lane
Pagham
Near Chichester
West Sussex
PO21 4NP

March 21st, 2017

Reference: housing, traffic, sewerage

Dear Ray

Thank you for the recent updates and correspondence. As always we are delighted by your efforts to represent the interests of the local community in your role.

I am sorry for the tardy nature of this letter, resort opening has been rather demanding on our collective time in recent weeks

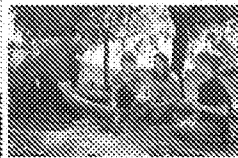
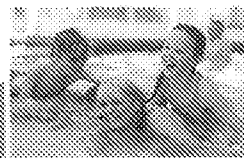
There are a few questions that you asked me to comment on in relation to our site. Set in context they are as follows:

Background of Church Farm

Church Farm has been owned and operated by Bourne Leisure, Haven Holidays, since 1988. The resort has traded as a caravan holiday park for approximately 70 years. We maintain a site with circa 900 units of caravan accommodation. Of this, approximately 650 are privately owned and 250 are rented on a holiday let basis weekly. We turn over approximately 18 Million pounds on this site trading between March 1st and November 1st. We close for 4 months annually allowing winter to pass and refurbishment works to take place. None of our customers live here residentially.

Traffic and visiting guests

Our business is very seasonal. In March on a typical weekend we may have 500-800 people on site supported by some 100-150 cars coming and going locally. At school holiday times and in the summer season we can have up to 4000 people on site and I would anticipate some 800-900 cars will access the site daily. Monday and Friday are real pinch points as 250 holiday maker families come and go over a 4 hour period with approximately 300 cars heading each way -- arriving and departing guests come twice weekly. We also have a large influx of caravan owners to the site on a daily basis and they frequent local attractions and have many visitors. I would anticipate at busy times in the region of 2-3 thousand car journeys happen to and from the site daily over a 24 hr period.

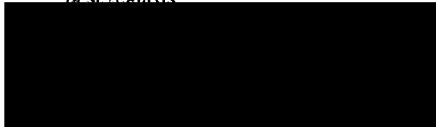


Sewerage background and information

We house an adopted sewerage relay station on resort. This is not owned and operated by us rather Southern Water. Our land is at a low point of the local community and in recent years we have been subject to significant sewerage flooding when the local homes sewerage that passes through us via a gravity fall incoming sewer main to a pumped rising main which becomes overwhelmed or is turned off remotely when other local stations cannot cope with demand. This happens in the open and closed periods of our season and at times can last 4-5 days. During overtopping events we are forced to pump this to avoid office and property loss. During periods of high rainfall these sewers have repeatedly surcharged with mixed grey water and in some instances raw sewerage. This is all logged with the environment agency and should be a matter of public record. This pumping station and rising main in our professional opinion is not sufficient to deal with the volumes of sewerage that it deals with despite recent investment and low level investment. Frequently tankers, provided by Southern Water, are required to attend site over long periods to assist with alleviating the flooding and overtopping issue followed by cleanup crews.

I am happy to comment further to these matters and remained somewhat concerned that whatever is proposed locally is properly considered by those planning it

Best regards



Andy Pope
General Manager

Appendix 2 – Theme 3. Supporting a prosperous rural economy

Paragraph 28

28. Planning policies should support economic growth in rural areas in order to create jobs and prosperity by taking a positive approach to sustainable new development. To promote a strong rural economy, local and neighborhood plans should:

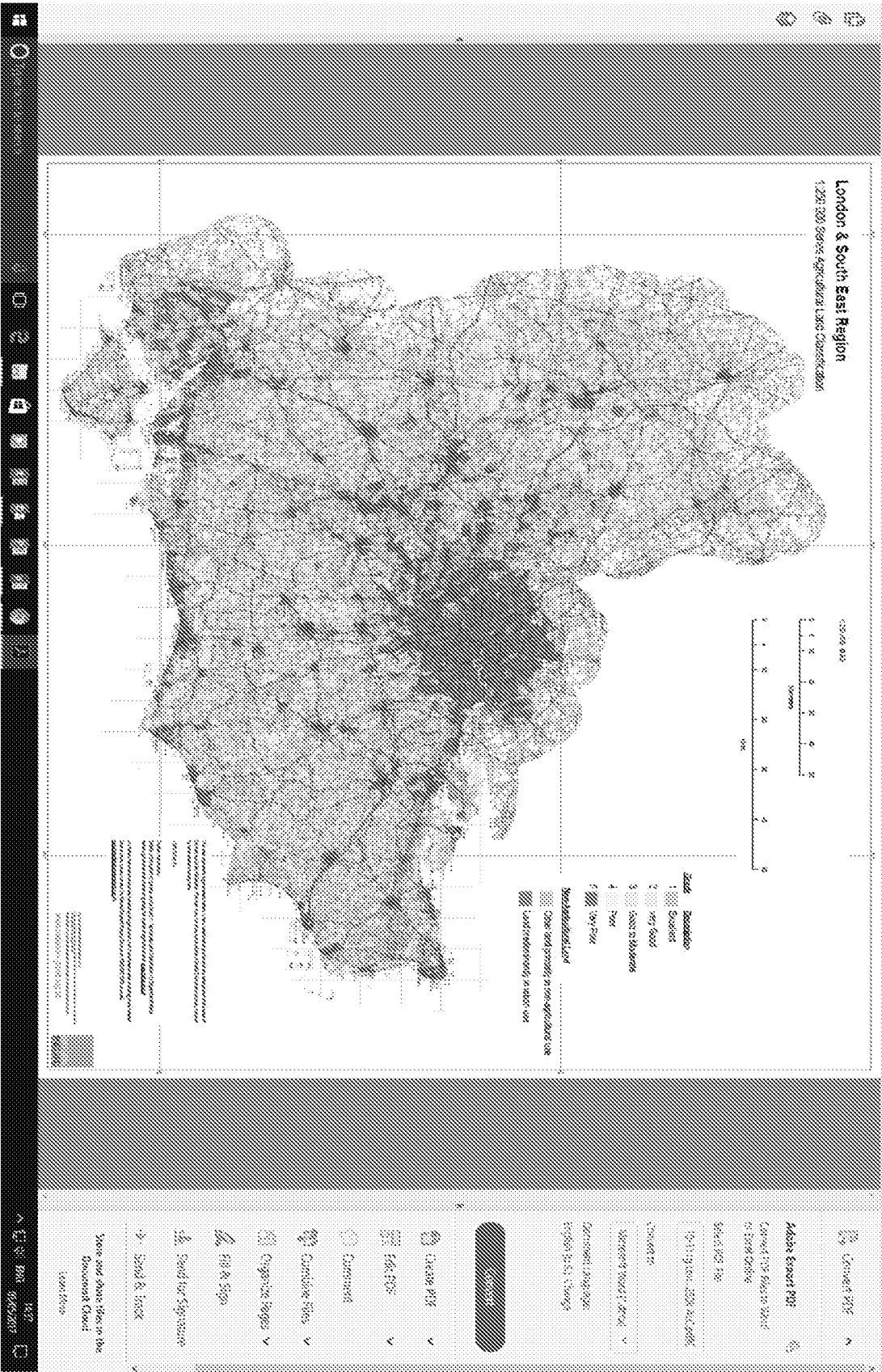
- *support the sustainable growth and expansion of all types of business and enterprise in rural areas, both through conversion of existing buildings and well-designed new buildings*
 - *promote the development and diversification of agricultural and other land-based rural businesses*
 - *Support sustainable rural tourism and leisure developments that benefit businesses in rural areas, communities and visitors, and which respect the character of the countryside. This should include supporting the provision and expansion of tourist and visitor facilities in appropriate locations where identified needs are not met by existing facilities in rural service centers*
 - *promote the retention and development of local services and community facilities in villages, such as local shops, meeting places, sports venues, cultural buildings, public houses and places of worship.*
-
- The sustained development of agriculture in the parish requires structured thought regarding the removal of grade 1 and 2 land from production to build houses. Decreasing the productive area of farms within the parish for a 1 off benefit in terms of the capital raised by sale of the land renders the productive capacity of any farm less cost effective. Once the land is sold for houses then the capital gained will be used to purchase more land in other areas with little or no benefit to the parish. The expansion of farming businesses by the merging of farms has aided the increased production of cheaper food over the last 50 years.. It is therefore not sensible to decrease the land holding of farms within the parish if we wish to maintain stable businesses, much better to maintain and encourage intensification of production to the benefit of the business and the economy of the village.
 - Within the village boundary there are many redundant and obsolete buildings. Some are already adopted for alternative use to that for which they were originally built. This re-assignment of use should be actively continued as within the short term it will produce work for local workers and in the medium term may be the sites for the establishment of new local businesses. Currently there is no consideration of these potential developments within the planning application submitted. No attempt is being made to make use of opportunity.
 - The village may be small but there are still “brown field” sites that are sensible areas for small scale, low cost housing development for first time buyers or retirees looking to down size. Redundant farm yard areas and buildings being ideal places for small scale developments to be built. If a local community is to flourish it needs houses to be re-cycled and new developments cater for needs, not build commuter style housing for families who will further overload the infrastructure.
 - Modern agriculture is large scale in its operations, mechanisation is very high capital cost, and however people are still needed to perform some of the most basic tasks. Despite the minimum wage these people are low paid workers who cannot afford the housing in the village even though they may work within its boundaries. They commute

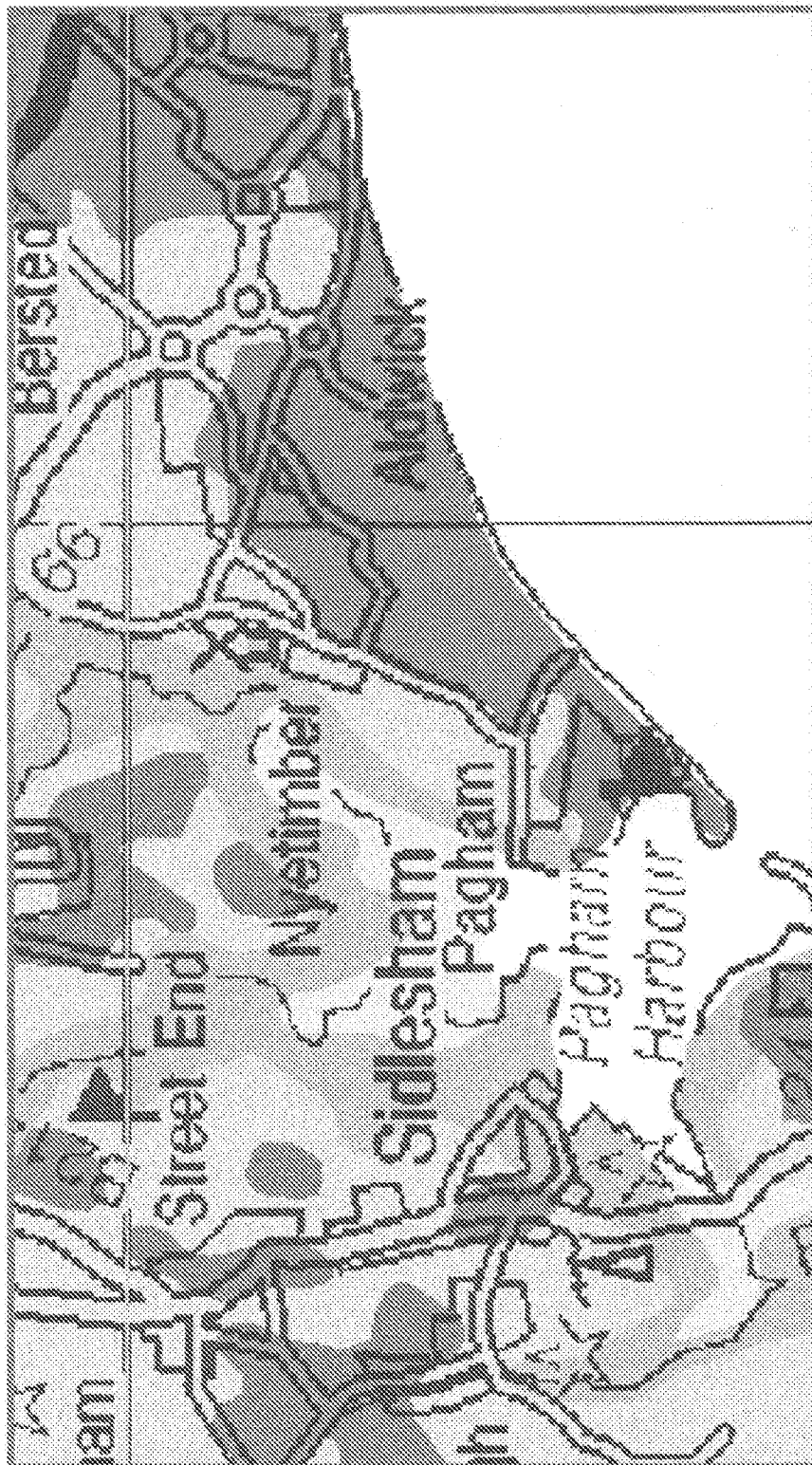
from surrounding towns and cities where they live in the cheapest accommodation. If low cost housing was available in the village then they could live and work in the same rural community and help maintain the local economy , not further load traffic onto the over used access roads.

- Large agri-business still requires external skills to service and maintain its facilities. From the simplest to the most complicated of equipment local based companies can be developed if there is a need and an opportunity in terms of an encouraging environment to do so.
- The importance of tourism is often overlooked as a major wealth earner for the community. With several large attractions in this area the flow of people and money into the local economy over and above their residence costs is healthy for local businesses in many forms. Encouragement for the provision of more facilities, the control of the village street scene and a general making aware to all residents and visitors alike of the leisure pursuits throughout the parish will help all to enjoy the life styles offered. The more to do in terms of rural pursuits the better the enjoyment and the greater the concentration of revenue for the village economy. However the swamping of the village by the proposed series of developments will damage existing tourist attractions by removing the visible rural ambience of the area and burying it in roads and houses on a large scale. Not really an ambition for any planning authority to be supporting.

Attention is also drawn to the comments of Pagham Parish Council's tree warden, Cllr David Huntley David Huntley *B.Sc. Horticulture, lecturer in Arboricultural Science*

- The site is highly fertile moisture and nutrient retentive grade 1 agricultural land or potentially grade 1 land in the Manhood Peninsular one of the most productive areas in the country with a very long growing season and most sunshine hours. The Manhood Peninsular produces 10% of Britain's vegetables and fruit. The loss of top quality growing areas is unacceptable in this age of increasing population in Britain. We are now only 50 to 60% self -sufficient in food and in the 1960 and 1970's we had a food surplus. Building on greenbelt top quality agricultural land in one of the best growing areas in the country makes absolutely no sense.





Appendix 3a – Promoting Sustainable Transport

Pagham Road is the single access for the community to the strategic road network. It is a winding, undulating country lane, originally intended to serve a series of small rural farmsteads. When coastal development proceeded in the 1960's the original tiny settlement expanded. The road was resurfaced, but its original character remained. Drainage of the road has always been a problem, as it is flanked for a significant length by intensive farming, and deep roadside ditches are less than 2 feet from the road edge. Vehicles are often witnessed either in ditches or through hedges or farm fences in crop fields adjacent. Farmers have complained of dangerous near – misses of their agricultural work force. The most prominent agricultural business is that by Barfoots of Botley, who grow, process and deliver fresh produce direct to major, well – known supermarket chains. Their business is heavily industrialised, with a massive processing, packing and chilling facility. They also have interests abroad in Spain, Florida and Senegal (West Africa). On site they have a large bio digester facility which provides the whole enterprise with electricity and sells the surplus to the National Grid.

The result of this very worthy and efficient enterprise is to impose significant HGV transit journeys upon Pagham Road, together with massive tractor/trailer loads of crop waste to serve the generating system. The latter frequently results in soil, slurry and crop waste on the road. These issues all contribute to the main access serving our community often being below an optimum safety expectation.

Consent has already been given for a series of large horticultural glasshouses on adjacent land, together with a further application under consideration for yet another large expansion of the processing and packing facility.

These very large HGV vehicles already cause much concern. There are significant numbers of immigrant workers and drivers employed in this business. Sometimes they take a wrong turning, get lost, and resort to problematic manoeuvres to extricate their vehicles. Road edge markers (dolly boards) and even the Vinnitrow road/B2166 roundabout show signs of HGV impact and damage. Pagham Road has areas of adverse camber, cross fall and road edge damage. Ponding and drainage across the road from adjacent fields (e.g. Parigo/Freshacres) all contribute to potential hazard, particularly as a result of heavy rainfall and frost. Road conditions thus prevailing are well – known to local folk, who seek to drive within those limitations. Nevertheless many accidents have occurred, thankfully significant numbers have been minor and remain unreported.

The unclassified part of Pagham Road (viz, from the Royal Oak – southwards) was stated by the Highways Superintendent at a WSCC Highways and Transport committee in 2012 to be “the most dangerous of its type in the County” (Pagham Parish Council and West Sussex County Council Chairmen were both present at that meeting).

The road is certainly unsafe for cyclists, as road edge damage often occurs (potholes) and there is little opportunity for avoiding action due to ditch proximity.

The road is frequently grid locked at heavy usage (Commuter) times. Personal experience provides examples such as 42 minutes from the Royal Oak junction to the B2145 Hunston roundabout.

On four occasions when Pagham Parish Council Councillors conducted 2 and a quarter sessions of traffic analysis, no less than 9 instances of emergency braking were observed at the Lower Bognor Road junction, in avoiding potential collisions with traffic emerging on to Pagham Road.

Appendix 3b

Pagham Parish Council contracted 2020 Consultancy, an independent traffic consultant, to consider the impacts of the three proposed developments currently proposed for Pagham. A copy of their report is included with the Parish Council's comments.

Appendix 4 Theme 6 – Deliver a wide choice of high quality homes

Detailed Comments

1. The demographics of the area clearly identify a need for housing to suit the more elderly residents who choose to live in Pagham because of its sympathetic environment and who are not discouraged by the poor transport links and lack of local employment opportunities. Providing suitable housing for the ageing population is seen as one of the key housing challenges nationally. Despite this nearly half (45%) of the proposed home types are larger 2 storey family homes which are generally considered unsuitable for this type of older resident. Additionally they are only promising that one of the 400 homes will be fully wheelchair accessible, which will again prohibit occupation by many elderly people.
2. Also as the affordable housing element of the development would only represent 30% of the planned housing the relatively larger proportion of 1 and 2 bedroom homes included in this element would still result in a low number of homes suitable for older residents, especially if (as seems likely) the majority of these could be in flats which will be up to 3 storeys high.
3. The detailed survey carried out among local residents as part of the preparation of the Pagham Neighbourhood plan provided a lot of detailed information about the types of new homes that should be built in Pagham. In terms of property types the most needed type (prioritised by over 60% of respondents) were single storey bungalows. There is a brief mention in the Design & Access Statement provided by the applicant that “there is the potential for single and 1.5 storey bungalows to be provided along the eastern edge of the development dependant on the demand”. However the plans provided show that the vast majority of properties on the eastern edges would be larger 3 and 4 bedroom properties, so are unlikely to be substituted with smaller bungalows.
4. Only 12% of the respondents thought that any 4 bedroom houses should be built, but there are a large number of these included in this proposal. Historically there has been very little demand for 4 bedroom homes in the area, especially those built in recent years on relatively smaller plots, as would be the case with this proposal. In the course of interviews with the main local estate agent they confirmed that it had proved difficult for them to sell the few recently built 4 bedroom homes within the village because the plot sizes were too small, especially compared with established village properties.
5. Less than 5% of local residents thought that a few large developments of the sort described in this application (some 400 homes) were the most appropriate way of adding new homes. Over 70% wanted development to be done in small increments.
6. The site in question was actually the third most objected to of all the seven major sites around Pagham that had been identified as possibilities for development. There were actually some 63 residents who specifically objecting to any housing development on this site.
7. The Pagham Village Design Statement has been quoted in the developer's application, including the statement that any development along Pagham Road should ensure that “front boundaries should contribute to the overall street scene”. However the plans show that most houses facing towards Pagham Road would be accessed from an internal

service road within the estate rather than having gardens and drives fronting on to Pagham Road itself as per existing properties. This would be very much out of character with the existing designs and totally at odds with the requirements of the Village Design Statement.

8. The village design statement also requires that any development should 'Preserve views over open land to the west of Pagham Road'. This would be completely lost with the very large development of houses, flats and shops that are proposed in this application.

Appendix 5 – Theme 10 - Meeting the challenge of climate change, flooding and coastal change

Flood Risk Assessment(FRA) by MJA

The report refers to the residential area covering an area of 20.16Ha in paragraph 2.1 yet in paragraph 5.3 it states that the development area is 19.75Ha. This discrepancy needs to be explained.

Paragraph 3.3 discusses the current site topography ranging from 3.5m AOD to 5.75mAOD. We are aware that the Environment Agency requires FFL to be no lower than 5.1mAOD. This will mean extensive landraising will be required to achieve this level which could potentially push floodwater elsewhere. This needs to be carefully considered as well as the visual impact that will be created.

Groundwater

Paragraphs 3.7 and 4.20 refer to groundwater not being an issue for the development site. It does not however, appear there has been any groundwater monitoring undertaken over a wet winter to verify this assumption. As groundwater levels are known to be generally high over the Pagham area it is important that comprehensive groundwater monitoring is undertaken across the proposed development area to demonstrate that none of the proposed SUDS will be affected by this.

This is also borne out in the Executive Summary where it highlights that the groundwater level are TBC yet also stating that groundwater is not a risk. This needs a proper assessment.

Fluvial

In the Executive Summary, the report states that fluvial flooding is not an issue yet only a desktop study has been undertaken.

The Parish Council would highlight that it is their understanding that the Environment Agency maps only show the fluvial flood outlines associated with main river which in this case is the Pagham Rife located several hundred meters away. The EA maps do not show the fluvial flood outlines associated with the local watercourses on or adjacent to the site.

We are aware that there are numerous culverted sections on these watercourses which are believed to be below the minimum recommended size of 450mm. These will cause restrictions to flow and are likely to become blocked increasing the flood risk. The applicant needs to undertake a full assessment/survey of these ditches and culverts and undertake a hydrological assessment to ensure they have the capacity to take existing and anticipated flows. This will complement a full groundwater assessment that should be undertaken and is especially important as the watercourses are where it is proposed to discharge all surface water.

Foul Water

Surprisingly, in 7.1.5 the report states that the development has 'no detriment' impact on the existing foul sewer system within Pagham. However, the Parish Council has been informed by Southern Water recently that there have been a total of 55 incidents that has been reported to the Environment Agency from January 2011 to October 2016 where unregulated discharges

have been made into the Pagham Rife and the Internationally protected SPA. It is clear that there are already major issues with the capacity at Pagham WWTW and it is misleading to suggest otherwise. This must be properly assessed before any permissions be granted for development.

Surface water discharges

There seems to be real confusion over the allowable discharge rates. In paragraph 5.5 it highlights that the proposed impermeable areas are based upon an assumed development area of between 40 – 45%. However, in paragraphs 5.3 and 5.4 it considers a catchment area of 19.75Ha and 20.16Ha.

When calculating for allowable discharge rates only the developable, impermeable areas should be considered as the other areas will remain the same. Therefore the catchment area for allowable discharge should be based on $19.75 \times 45\% = 8.88\text{Ha}$ and not the total site.

Sea Defences

In Paragraph 4.16 the predicted 1:200 year flood level for 2115 is 4.7mAOD. It must be highlighted that this level is a flat level and does not make any allowances for waves which can be considerable. Also as part of the site is below this level extensive landraising will be required to provide protection. This will have an unacceptable visual impact on the surrounding area. Paragraph 4.7 identify that the Inland banks and Pagham Harbour currently offer a 1:200 year storm protection. We would question where this information came from as we are of the understanding that there are large parts of the Harbour which has a much lower standard of protection.

Appendix 6a - Theme 11: Conserving and enhancing the natural environment

The site is a south coast plain natural character area which contains streams, hedgerows, and ditches. It is part of the Manhood peninsular characteristic landscape. The hedgerows and streams provide and are part of an important coastal plain network of corridors and flightpaths for moths, butterflies birds and bats linking Pagham to Pagham Harbour LNR and Oving, Boxgrove, Eartham and Slindon woods via the rifes and the river Lavant. Mammals also using these corridors include water voles, hedgehogs, deer and badgers to name but a few.

Pagham village design statement identifies the site as part of our pleasant rural aspect, open spaces outside built up areas, and peaceful village atmosphere.

The development of these 400 houses along with 80 houses on Church Barton Farm will have demonstrable negative impact on the 'Landscape Character' and 'quality of the environment'. The sites together I suggest would not pass the Natural England (GLVIA3) guidelines for landscape and visual impact assessment i.e. total loss of open field countryside. The fields in Pagham are vital winter food source for Brent geese and other overwintering birds from the SPA, RAMSAR Pagham harbour nature reserve which feed on winter cereals and also the permanent pasture provides food for raptors. There are photographic records of geese on all the fields surrounding the LNR Pagham Harbour Nature reserve (Photographs taken in midwinter in severe weather). The site is far too close to Pagham Harbour nature reserve to be even considered for development and is along with other fields in Pagham important supporting winter forage habitat for migrants.

The ditches and streams running through the site contain a recovering population of water voles (wrongly identified in the past as rats and partly destroyed by ADC acting on misinformed advice) which would be disturbed and lost by this development. They are also connected to the treed hedgerows and woodlands of Sefter Road and Hook Lane. Destruction of part of these hedgerows for access would ruin them as a wildlife corridor and flight path for Land Mammals, Bats, Birds, Newts, frogs, toads, slowworms, moths and butterflies. The disturbance caused by the building will complete the habitat destruction of Pagham (taking all the other Pagham development sites) which will not be repaired by mitigation monies of £1275 per unit built. (Wildlife and countryside act 1981 and related acts). The Sussex biodiversity record centre information for 15th March 2017 shows high numbers and variety of wildlife sheltering in this site and ecosystem.

There is no overriding public interest for the houses to be built. Pagham does not need that many extra houses, the roads couldn't cope and jobs do not exist to sustain the increased population imported. This is contrary to conservation of species habitats regulations, the Natura 2000 framework and the Waterways Framework Directives.

Various legal cases indicate that if doubt exists that there will be no deleterious effects to the environment planning permission should not be given. (Court of justice of the European Union, Sweetman Case etc. – see planning statements)

The site is highly fertile moisture and nutrient retentive grade 1 agricultural land or potentially grade 1 land in the Manhood Peninsular one of the most productive areas in the country with a very long growing season and most sunshine hours. The Manhood Peninsular produces 10% of Britain's vegetables and fruit. The loss of top quality growing areas is unacceptable in this age of increasing population in Britain. We are now only 50 to 60% self-sufficient in food and in the

1960 and 1970's we had a food surplus. Building on greenbelt top quality agricultural land in one of the best growing areas in the country makes absolutely no sense.

The soil is London clay which contains a high proportion of sand and silt making it very liable to solifluction in periods of high rainfall and destructuring as occurs in a building site. The artesian chalk and gravel aquifers underneath exploited by local farms and nurseries are likely to form overland streams causing a flooding problem in Aldwick and Pagham flooding local houses and blocking the Pagham Road (as happened in 2001 and in June 2014 – to quote just few of the many occasions).

When flooding and high rainfall occur, the Summer Lane sewage works is overwhelmed and raw sewage is discharged into Pagham Harbour Local Nature Reserve. This occurred 55 times in last 6 years (since 2011). Swales and ponds do not solve the problem they merely delay it for a few hours. Tapping into existing drains is insufficient (SUDS – sustainable urban drainage). Building 80 houses in this site (and 400 south of Summer Lane) covering a large proportion of these fields in concrete is not going to help.

Paragraph 108 of NPPF: - 'Local Authorities should ensure developments are not limited in life by coastal change.' The gravel aquifers connect to the sea and only permit drainage at low tide. It also worth pointing out that much of the site is only 4 metres above O.D. Newlyn which means that it could flood in the future with sea level rise and a bad storm surge coming up the rife.

For all of the above environmental reasons we strongly suggest planning permission is refused as the environmental impact inflicted is unacceptable. It will inflict environmental vandalism and unsustainable housing numbers on the pretty and very old hamlet of Pagham. (Thomas a Becket church dates from circa 800). We are not against sustainable development. In our neighbourhood plan survey we suggested a number of 100 to 135 houses. Just fulfilling quotas by inflicting unsustainable numbers, doubling the population of Pagham on a number of Greenfield sites, is not an appropriate or intelligent answer. Why are we not exploiting large Brown field sites such as Ford, Tangmere, and Shoreham aerodromes and also derelict farm yards?

Comments from David Huntley (Chair of Pagham Planning; B.Sc. Horticulture, lecturer in Arboricultural Science, Pagham and Nyetimber tree warden)

Appendix 6b - Theme 11: Conserving and enhancing the natural environment

Pagham Parish Council has commissioned studies by professional ecologist Petra Billings Phd.CEcol.MLIEEM (Farming & Woodland Advisor – Sussex Woodlands). Her respective reports confirm the presence of protected species on all three sites currently under consideration for development (viz: Sefton Road/Hook Lane and Pagham Road). Four species of bats have been confirmed on two of the sites. Red and Amber listed bird species on all sites, also water voles reptiles and butterflies. The whole of the Parish of Pagham falls within the mitigation zone of the Pagham Harbour Nature Reserve. Resident and migrating species (particularly birds) inhabit those nearby fields for nesting and foraging. Special habitat wild plants have been found along field margins and on-site watercourses which support certain rare species. It has been confirmed that Brent Geese (winter migrants) use these fields for foraging, and photographs have been produced to confirm this. Petra Billings has walked the sites and taken many photographs. She states in her professional opinion that the sites are particularly sensitive and that the individual and cumulative effects of the proposed development will have a serious negative effect upon wildlife, biodiversity and special habitat found to be present (eg food plants and rare insect egg repository plants).

Proposed removal of certain trees is also viewed as destruction of nesting and bat roosts. This is also the case in respect of proposed demolitions, where bats and hibernating butterflies have been found (a criminal offence to destroy!)

The NPPF requires that the “Rural environment shall be conserved and enhanced” rather than irrevocably damaged.

Watercourses from these sites all eventually feed into the Pagham Rife and the Pagham Harbour Nature Reserve, which is protected by UK, EU and International laws and directives. Building and construction/excavation procedures are certain to impact upon these site drainage systems. The proposed use of the culverted 1940's tank ditch will introduce silt and contaminated residue into the system bringing serious potential harm to the sensitive ecosystem.

The Sussex Biodiversity Records Centre has contributed specific detail of protected species found on these sites, which has been of significant value to those conducting surveys for Pagham Parish Council.

A copy of Petra Billings Woodland Consultancy Ltd's report is included with the Parish Council's comments.

2017

Traffic study into proposed developments in vicinity of Pagham



2020 Consultancy

Version 1

Created by Adam Bunce

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1.0 Introduction

2020 Consultancy have been commissioned by Pagham Parish Council to review the existing road network within the village of Pagham as well as the wider strategic road network southwards from the A27 to assist determine the suitability of a number of planning applications that have been submitted to Arun District Council.

The study area is illustrated in figure 1 below and includes:

- B2145 south of the A27 Chichester by-pass;
- B2166 just west of North Mundham village;
- Pagham Road just north of the junction with Lower Bognor Road;
- Pagham Road between the junctions of Lower Bognor Road and Sefter Road;
- Sefter Road just east of the junction with Hook Lane.

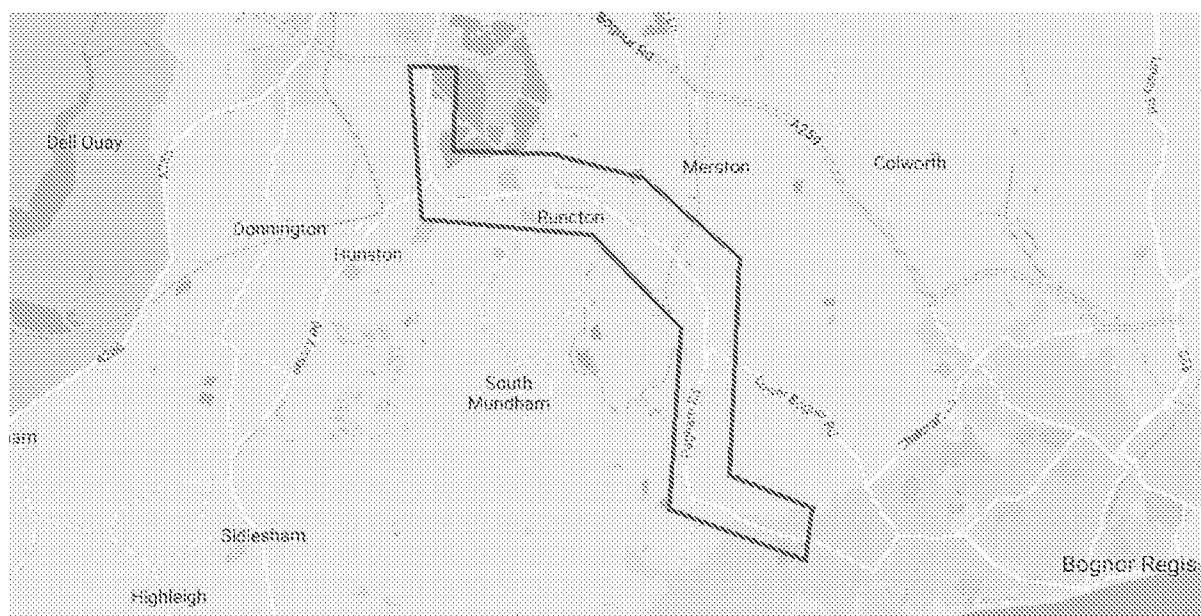


Figure 1

2.0 Background

Pagham is a semi-rural, semi-urban coastal village and civil parish in the Arun district of West Sussex, England, with a population of around 6,100. The village is located approximately 6 miles south of the closet city, Chichester and approximately four miles west of the closest town Bognor Regis. Access to Pagham is difficult with only one significant road that leads directly into the village centre, Pagham Road. To access Pagham from the north, the route takes you from the A27 southwards along the B2145, traveling through the village of North Mundham along the B2166, before entering Pagham Road just north of Lagness. Access onto Pagham Road from the east can be made via Lower Bognor Road, or Sefter Road.

The closet train station to Pagham is Bognor Regis which is approximately 4.5 miles from the centre of Pagham village. There are two bus services that serve the village, the 600 and 660 that both travel between Chichester and Bognor Regis.

As part of the study 2020 Consultancy have considered the following planning applications to determine the likely impact they will have on the road network:

P/6/17/OUT - Outline application with some matters reserved for construction of up to 300No. new homes, Care home of up to 80No. beds, D1uses of up to 4000sqm including a 2 form entry Primary School, formation of new means of access onto Hook Lane & Pagham Road, new pedestrian & cycle links, the laying out of open space, new strategic landscaping, habitat creation, drainage features & associated ground works & infrastructure.

P/134/16/OUT - Outline application with some matters reserved for development of up to 250 dwellings (incl affordable homes), provision of land for a replacement scout hut, land for an Ambulance Community Response Post facility & land for 1FE primary school. Primary vehicular access from Sefter Rd & demolition of 80 Rose Green Road & creation of pedestrian & emergency only access. Provision of public open space incl childrens play areas, landscaping, drainage & earthworks.

P/140/16/OUT - Outline application for access only - mixed use development comprising of up to 400 dwellings, a care home with up to 70 beds, a Local Centre comprising up to 2000sqm of A1/A2/A3/D1/sui generis floorspace, provision of land for a 1FE primary school (with sufficient space to ensure that it is expandable to 2FE), provision of land for a scout hut, safeguarding of land to help link the site to the Pagham Harbour Cycle Route & other community uses including public open space & allotments with some matters reserved.

These three planning applications total a potential 950 additional dwellings, two new care homes with a combined total of 150 beds, three new primary schools, and 6000sqm of land use. However upon a more detailed review there is a potential for an additional 150 dwellings due to only one school being constructed out of the three proposed sites, which would exacerbate the situation further still. This will result in significantly more modal trips on the road network.

As stated by the Office for National Statistics, in England on average there are 2.4 occupants in each household. Therefore if 950 additional dwellings were constructed within the vicinity of Pagham, the population would increase by approximately 2280. This would increase the population of Pagham village by over 37%.

3.0 Automatic Traffic Counts

As part of our involvement working with Pagham Parish Council on the review of these proposed developments, we commissioned Automatic Traffic Counts at five locations on the road network on the approach to Pagham from the north and the east. These five locations were:

- Site 1 – B2145 south of the A27 Chichester by-pass;
- Site 2 – B2166 just west of North Mundham village;
- Site 3 – Pagham Road just north of the junction with Lower Bognor Road;

- Site 4 – Pagham Road between the junctions of Lower Bognor Road and Sefter Road;
- Site 5 – Sefter Road just east of the junction with Hook Lane.

Figures 2 and 3 show the location plans for these Automatic Traffic Counts (ATC). The purpose of the ATC was to identify existing traffic volume and traffic speed to determine the existing capacity of the road network and identify what measures, if any would be required to address the additional 37% of potential traffic entering and exiting the Pagham area.



Figure 2



Figure 3

The ATC were in place for a period of seven full days from the 12th January till 19th January 2017. Results from the 12th were not included as a full day wasn't available. It is worth noting that Pagham is subject to higher volumes of traffic during the peak summer months so the results can be classified as lower levels. Following discussions with the Parish Council it is estimated that an additional 100-200 vehicles a day can be travelling to or from Pagham, reducing the road capacity further still. This needs to be considered as part of any planning submission.

Each ATC site recorded both directions of travel for three vehicle classes:

- Cars and light goods vehicles;
- Other goods vehicles / buses;
- Large other goods vehicles.

3.10 Site 1 – B2145 south of the A27 Chichester by-pass

Across the seven days, on average 7201 vehicles travelled north over the ATC and 7046 vehicles travelled south over the ATC. Approximately 94% of these vehicles were either cars, light goods vehicles, or buses. The average number of vehicles travelling over the ATC increases if the seven day average is reduced to a five day average to cover Monday to Friday. The five day average northbound increased to 7961 and the five day average southbound increased to 7818. This means on average 331 vehicles an hour travel northbound and 326 vehicles an hour travel southbound between Monday and Friday.

However during the peak period the highest number of vehicles recorded in one direction over a one hour period was 996. This occurred northbound between 7am and 8am on Wednesday 18th January. This equates to 17 vehicles travelling over the ATC every minute. This figure would be higher if it wasn't for traffic congestion resulting in slower mean speeds. During the same timeframe 33% of the vehicles were travelling between 11-20mph. This section of B2145 has a national speed limit of 60mph. Only 2.5% of vehicles travelling northbound over the ATC between 7am and 8am were travelling over 40mph.

The mean speed during this hour was 24.7mph. If you compare this figure to 11am-129m when the traffic volume is considerably lower the mean speed increases to 36.4mph. Nearly 19% of vehicles travelling northbound over the ATC between 11am-12pm were travelling over 40mph.

The average speed over the ATC across the seven days was 35.1mph northbound and 41.4mph southbound. Taking the average speed during the Monday-Friday morning peak of 7am-8am the average speed was 25.1mph northbound and 39.2mph southbound. This suggests that there is little congestion travelling southbound towards Pagham whereas there is significant congestion travelling northbound towards the A27.

Adding an additional 37% of potential traffic on this road network would result in considerably greater journey times and congestion. This could mean an additional 369 vehicles on the B2145 travelling northbound trying to access the A27. This would result in 23 vehicles a minute or a vehicle less than every three seconds.

Having reviewed the road network around the B2145 it is our opinion that it isn't possible to increase capacity sufficiently to allow this many vehicles to access the road during peak times. We have also analysed the surrounding area including land use to determine possible solutions such as carriageway widening but due to the existing land use such as properties this proposal doesn't seem viable.

One of the major reasons for the existing congestion on the B2145 is due to the congestion experienced on the A27 by-pass during peak periods. This level of traffic creates difficulties for traffic to exit the B2145 safely. Therefore the proposed developments would impact an already over capacitated strategic route.

The location of site one is shown in figure 4 below.



Figure 4

3.11 Recommended Action

To consider the proposed development sites it is recommended that major road improvements would be required. The likely cost will be in excess of £10 million. It would be necessary to consider junction improvements to the following junctions:

- Roundabout junction of B2145 and B2166;
- Roundabout junction of Lagness Road and Vinnetrow Road;
- Junction of Pagham Road and Lower Bognor Road;
- Junction of Pagham Road and Sefter Road.

The B2145 and B2166 routes into and out of Pagham would also need significant investment to allow the additional traffic to not result in a negative impact on the existing road network. This would most likely require carriageway widening. However following an initial investigation this proposal is highly unlikely as significant land ownership would be required. Due to a number of landowners' owners operating business such as farming and crop growing it's envisaged that this land negotiation would be unsuccessful.

It is also worth noting that there are a number of pinch points that would result in substantial congestion bottlenecks occurring, which would significantly reduce the impact of any road improvement scheme implemented.

Therefore there isn't a viable recommended action for the vicinity of site 1 as part of the proposed development sites, which means the total size of the sites should be reduced to a more manageable level.

3.20 Site 2 – B2166 just west of North Mundham village

Across the seven days, on average 5738 vehicles travelled east over the ATC and 6536 vehicles travelled west over the ATC. Approximately 97% of these vehicles were either cars, light goods vehicles, or buses. The average number of vehicles travelling over the ATC increases if the seven day average is reduced to a five day average to

cover Monday to Friday. The five day average eastbound increased to 6536 and the five day average westbound increased to 6915. This means on average 272 vehicles an hour travel eastbound and 288 vehicles an hour travel westbound between Monday and Friday.

However during the peak period the highest number of vehicles recorded in one direction over a one hour period was 952. This occurred westbound between 8am and 9am on Wednesday 18th January. This equates to 16 vehicles travelling over the ATC every minute. This figure would be higher if it wasn't for traffic congestion resulting in slower mean speeds. During the same timeframe 88% of the vehicles were travelling less than 35mph. This section of B2166 has a national speed limit of 60mph. Only 2.1% of vehicles travelling westbound over the ATC between 8am and 9am were travelling over 40mph.

The mean speed during this hour was 24.7mph. If you compare this figure to 11am-12pm when the traffic volume is considerably lower the mean speed increases to 36.4mph. Nearly 19% of vehicles travelling northbound over the ATC between 11am-12pm were travelling over 40mph.

The average speed over the ATC across the seven days was 36.5mph eastbound and 34.6mph westbound. Taking the average speed during the Monday-Friday morning peak of 7am-8am the average speed was 33.7mph eastbound and 28.6mph westbound. This suggests that there is greater congestion travelling westbound towards the B2145 which subsequently leads to the A27.

These results reinforce the assumption that the additional 37% of potential traffic from the proposed developments would impact the wider road network including the B2145 and the A27.

Having reviewed the road network around the B2166 it is our opinion that it isn't possible to increase capacity sufficiently to allow this many vehicles to access the road during peak times. We have also analysed the surrounding area including land use to determine possible solutions such as carriageway widening but due to the existing land use such as properties this proposal doesn't seem viable. It is also considered irrelevant as improving the road network along the B2166 will not benefit the local road network as traffic congestion would still occur on the B2145.

The location of site two is shown in figure 5 below.



Figure 5

3.21 Recommended Action

To consider the proposed development sites it is recommended that major road improvements would be required. The likely cost will be in excess of £10 million. It would be necessary to consider junction improvements to the following junctions:

- Roundabout junction of B2145 and B2166;
- Roundabout junction of Lagness Road and Vinnetrow Road;
- Junction of Pagham Road and Lower Bognor Road;
- Junction of Pagham Road and Sefter Road.

The B2145 and B2166 routes into and out of Pagham would also need significant investment to allow the additional traffic to not result in a negative impact on the existing road network. This would most likely require carriageway widening. However following an initial investigation this proposal is highly unlikely as significant land ownership would be required. Due to a number of landowners' owners operating business such as farming and crop growing it's envisaged that this land negotiation would be unsuccessful.

It is also worth noting that there are a number of pinch points that would result in substantial congestion bottlenecks occurring, which would significantly reduce the impact of any road improvement scheme implemented.

Therefore there isn't a viable recommended action for the vicinity of site 2 as part of the proposed development sites, which means the total size of the sites should be reduced to a more manageable level.

3.30 Site 3 – Pagham Road north of junction with Lower Bognor Road

Across the seven days, on average 6363 vehicles travelled north over the ATC and 6791 vehicles travelled south over the ATC. Approximately 97% of these vehicles were either cars, light goods vehicles, or buses. The average number of vehicles travelling over the ATC increases if the seven day average is reduced to a five day average to

cover Monday to Friday. The five day average northbound increased to 7139 and the five day average southbound increased to 7654. This means on average 297 vehicles an hour travel northbound and 319 vehicles an hour travel southbound between Monday and Friday.

However during the peak period the highest number of vehicles recorded in one direction over a one hour period was 1248. This occurred northbound between 5pm and 6pm on Wednesday 18th January. This equates to 21 vehicles travelling over the ATC every minute. This figure would be higher if it wasn't for traffic congestion resulting in slower mean speeds. During the same timeframe 87% of the vehicles were travelling less than 35mph. This section of Pagham Road has a national speed limit of 60mph. Only 1.8% of vehicles travelling southbound over the ATC between 5pm and 6pm were travelling over 40mph.

The mean speed during this hour was 30.5mph. If you compare this figure to 11am-12pm when the traffic volume is considerably lower the mean speed increases to 41.2mph. Nearly 49% of vehicles travelling southbound over the ATC between 11am-12pm were travelling over 40mph.

The average speed over the ATC across the seven days was 40.7mph northbound and 38.5mph southbound. Taking the average speed during the Monday-Friday morning peak of 7am-8am the average speed was 36.1mph northbound and 37.7mph southbound. However taking the Monday-Friday afternoon peak of 5pm-6pm the average speed was 39.2mph northbound and 32.4mph southbound. This suggests that the majority of traffic in the morning peak is heading north out of Pagham and the majority of traffic in the afternoon peak is heading south into Pagham. Therefore it is a fair assumption that this traffic is residents of Pagham village.

Adding an additional 37% of potential traffic on this road network would result in greater journey times and congestion, especially in the afternoon peak with an average of 1099 vehicles travelling southbound along Pagham Road. This could mean an additional 407 vehicles on Pagham Road travelling southbound. This would result in 25 vehicles a minute or a vehicle less than every three seconds.

Having reviewed the road network around Pagham Road it is our opinion that it isn't possible to increase capacity sufficiently to allow this many vehicles to access the road during peak times. We have also analysed the surrounding area including land use to determine possible solutions such as carriageway widening but this proposal doesn't seem viable. It is also considered irrelevant as improving the road network along Pagham Road will not benefit the local road network as traffic congestion would still occur on the B2166 or the B2145.

The location of site three is shown in figure 6 below.



Figure 6

3.31 Recommended Action

To consider the proposed development sites it is recommended that major road improvements would be required such as road widening along Pagham Road. The likely cost will be in excess of £5 million. However following an initial investigation this proposal is highly unlikely as significant land ownership would be required. Due to a number of landowners' owners operating business such as farming and crop growing it's envisaged that this land negotiation would be unsuccessful.

Therefore there isn't a viable recommended action for the vicinity of site 3 as part of the proposed development sites, which means the total size of the sites should be reduced to a more manageable level.

3.40 Site 4 – Pagham Road between the junctions of Lower Bognor Road and Sefter Road

Across the seven days, on average 3981 vehicles travelled north over the ATC and 3841 vehicles travelled south over the ATC. Approximately 96% of these vehicles were either cars, light goods vehicles, or buses. The average number of vehicles travelling over the ATC increases if the seven day average is reduced to a five day average to cover Monday to Friday. The five day average northbound increased to 4443 and the five day average southbound increased to 4246. This means on average 185 vehicles an hour travel northbound and 177 vehicles an hour travel southbound between Monday and Friday.

However during the peak period the highest number of vehicles recorded in one direction over a one hour period was 786. This occurred northbound between 7am and 8am on Wednesday 18th January. This equates to 13 vehicles travelling over the ATC every minute.

The mean speed between 7am and 8am was 42.2mph. If you compare this figure to 11am-12pm when the traffic volume is lower the mean speed increases to 44.4mph.

This would suggest that traffic volume isn't an issue along this section of Pagham Road and doesn't have a significant impact on drivers speed along the route.

The average speed over the ATC across the seven days was 45.1mph northbound and 45.0mph southbound. Taking the average speed during the Monday-Friday morning peak of 7am-8am the average speed was 42.8mph northbound and 42.9mph southbound. This suggests that although traffic volume isn't a major issue there is a slower average speed during the Monday-Friday morning peak.

Adding an additional 37% of potential traffic on this road network would result in slightly greater journey times and congestion. As this ATC site is within close proximity to a proposed development site this would seem to support the development site. However this isn't the case as the evidence suggests that the wider local road network and strategic road network wouldn't be able to cope with the additional capacity.

Therefore it is crucial that both the wider local road network and strategic are deliberated when considering the proposed development sites. It is possible that developers will carry out local traffic surveys, which may demonstrate the road network can manage the additional traffic. However without considering the wider road network we consider this data to be meaningless as the evidence suggests that vast numbers of residents travel outside of Pagham for work or education etc.

Having reviewed the road network around the B2145 it is our opinion that it isn't possible to increase capacity sufficiently to allow this many vehicles to access the road during peak times. We have also analysed the surrounding area including land use to determine possible solutions such as carriageway widening but due to the existing land use such as properties this proposal doesn't seem viable.

The location of site four is shown in figure 7 below.



Figure 7

3.41 Recommended Action

To consider the proposed development sites it is recommended that road improvements would be required such as junction improvements and road safety initiatives along Pagham Road. The likely cost will be in excess of £1 million. Although there isn't high numbers of reported collisions along Pagham Road, our investigation has discovered high numbers of small collisions and accidents have occurred including vehicles leaving the carriageway and small vehicle impacts that haven't resulted in emergency services being involved.

Therefore the recommendation for the vicinity of site 4 as part of the proposed development sites includes the following:

- **Road safety improvements along Pagham Road;**
- **Junction improvements at the junction of Pagham Road and Lower Bognor Road;**
- **Junction improvements at the junction of Pagham Road and Sefton Road.**

3.50 Site 5 – Sefton Road just east of the junction with Hook Lane

Across the seven days, on average 3279 vehicles travelled east over the ATC and 4010 vehicles travelled west over the ATC. Approximately 98% of these vehicles were either cars, light goods vehicles, or buses. The average number of vehicles travelling over the ATC increases if the seven day average is reduced to a five day average to cover Monday to Friday. The five day average eastbound increased to 3587 and the five day average westbound increased to 4384. This means on average 149 vehicles an hour travel eastbound and 183 vehicles an hour travel westbound between Monday and Friday.

However during the peak period the highest number of vehicles recorded in one direction over a one hour period was 508. This occurred westbound between 7am and 8am on Tuesday 17th January. This equates to 22 vehicles travelling over the ATC every minute.

The mean speed between 7am and 8am was 30.3mph. If you compare this figure to 11am-12pm when the traffic volume is lower the mean speed actually decreases to 28.5mph. This suggests that commuters are likely to travel faster as they have a destination they are endeavouring to get to as quickly as possible. It's a fair assumption that they are travelling faster along this section of road as they expect to encounter congestion further along the route i.e. the B2145 or A27.

The average speed over the ATC across the seven days was 30.2mph eastbound and 29.8mph westbound. Taking the average speed during the Monday-Friday morning peak of 7am-8am the average speed was 30.6mph eastbound and 30.4mph westbound.

Adding an additional 37% of potential traffic on this road network would result in slightly greater journey times and congestion. As this ATC site is within close proximity to a proposed development site this would seem to support the development site. However this isn't the case as the evidence suggests that the wider local road network and strategic road network wouldn't be able to cope with the additional capacity.

The location of site five is shown in figure 8 below.



Figure 8

3.51 Recommended Action

To consider the proposed development sites it is recommended that road improvements would be Sefton Road. The likely cost will be in excess of £500,000. It is noted that proposed traffic calming measures are considered along Sefton Road as part of the proposed development sites. This may assist in reducing traffic speed. This in combination with junction improvements with Pagham Road may be sufficient in dealing with the additional traffic resulting from the development sites.

However it isn't envisaged that the proposals will make the necessary improvements regarding traffic volume. However as the traffic survey data suggests that traffic volume isn't as high in the vicinity of site 5 it may be possible to produce suitable proposals. This will need further investigation before a final decision can be made on the development sites as this cannot be a retrospective action.

Therefore the recommendation for the vicinity of site 5 as part of the proposed development sites includes the following:

- **Road safety improvements such as traffic calming along Pagham Road;**
- **Junction improvements at the junction of Pagham Road and Sefton Road.**

4.0 Summary and Conclusions

To summarise the ATC surveys it is possible to determine that the proposed development sites will have a more substantial impact on the wider local road network and strategic road network compared to the local road network within the vicinity of the proposed sites. Therefore it's crucial the entire road network is considered when determining the outcome of the sites.



It is our opinion that these results are more concerning for the development sites than if the negative impact was only on the local road network and not the wider local road network and strategic road network. This is because there is less traffic to consider and proposals to address the impact will be more straight forward and less costly.

In our opinion there isn't viable options for the wider local road network such as the B2166 and B2145 and strategic road network such as the A27 to support the proposed development sites. Therefore we recommend that the development sites are reconsidered with a view to considerably reducing the number of dwellings or relocating the sites to an area that has greater capacity on the road network.

This recommendation is further supported by the Highways England decision to not progress with the A27 major improvement scheme. This decision means the A27 will be subjected to additional traffic, which will result in further delays on the road network. Having reviewed the planning applications, it's felt that no consideration has been given to the impact to the strategic road network. This is a fundamental oversight as the results of the traffic surveys clearly demonstrate that the majority of residents of Pagham wish to travel north towards the A27 on a daily basis, especially during peak times i.e. 7am-9am.