

WEST SUSSEX COUNTY COUNCIL CONSULTATION

TO:	Arun District Council FAO: David Easton
FROM:	WSCC - Highways Authority
DATE:	23 April 2019
LOCATION:	Land north of Hook Lane, Pagham
SUBJECT:	P/30/19/OUT Outline application with some matters reserved for the construction of up to 300 No. new homes, a care home of up to 80 beds, D1 uses of up to 4,000 sqm including a 2 form entry primary school, the formation of new means of access onto Hook Lane & Pagham Road, new pedestrian & cycle links, laying out of open space, new strategic landscaping, habitat creation, drainage features & associated ground works & infrastructure. This application may affect the setting of a listed building & is a Departure from the Development Plan (resubmission following P/6/17/OUT).
DATE OF SITE VISIT:	As part of P/6/17
RECOMMENDATION:	More Information
S106 CONTRIBUTION TOTAL:	£ See below for breakdown.

1. The current application is a resubmission of P/6/17. This previous application is noted as having being refused by the Arun District Council planning committee for a single highway way related reason. West Sussex County Council, in its role as Local Highway Authority, offered no objection to P/6/17.
2. Given the current application is a resubmission, there have been no material change in circumstances that may change WSCC's previous advice. For the purposes of this response, those comments previously issued are reiterated here.

Access

3. The development is to take vehicular access from Pagham Road and Hook Lane. All accesses are to take the form of simple priority junctions. Two accesses are to be provided on Hook Lane with a further single access onto Pagham Road. This arrangement reflects that submitted initially with P/6/17.
4. Whilst there is no objection to the three accesses, there appears scope to rationalise and remove the more southerly Hook Lane access; this access was removed as part of P/6/17. This access is unlikely to be used by any significant volume of traffic in light of the location of the northerly Hook Lane and Pagham Road accesses. It would be requested for consideration to be given to reducing the number of access points onto Hook Lane.

5. Notwithstanding the above, the accesses have been designed to the relevant guidance and standards. This would be determined based on the posted speed limit or the recorded 85th percentile wet weather vehicle speeds. For Hook Lane, the posted speed limit is 30mph. As such, the starting point for the design of these should be Manual for Streets (MfS and MfS 2). Recorded 85th percentile vehicle speeds are much greater than the posted limit (recorded as 41.4mph northbound and 38.5mph southbound) although it's unclear if a wet weather adjustment has been applied to these speeds. Even so, in light of the local context, the LHA are satisfied that MfS remains the appropriate guidance.
6. In checking the stopping sight distances at the two Hook Lane accesses against the recorded speeds, the sightlines appear to exceed those typically required using MfS Stopping Sight Distances. On this basis, the LHA are satisfied that adequate visibility can be achieved onto Hook Lane within land forming part of the adopted highway and/or land under the control of the applicant. The geometry in all other respects appears acceptable and complies with current guidance.
7. As noted above, the access onto Pagham Road takes the form of a priority junction. Given the recorded speeds (50.5mph northbound and 50mph southbound (again it's unclear if these are wet weather speeds)) and function of the road, the Design Manual for Roads and Bridges is considered to be the appropriate highway design guidance.
8. Based on the recorded 85th percentile speeds and the DMRB, SSDs of 152 metres to the south and 149 metres to the north are required. These are demonstrated from an X distance of 4.5 metres. The distances are considered acceptable and can be achieved within land forming part of the adopted highway and/or under the control of the applicant.
9. The vehicle access arrangements have been reviewed by way of a Stage One Road Safety Audit. Whilst appreciated that the Audit was accepted previously, the standards on which RSAs are undertaken has been updated. The Audit should be updated so as to comply with the latest RSA standards.
10. As part of the Pagham Road access, the developer is proposing to fund the possible extension of the 30mph speed limit northwards. Such an extension would be determined against the WSCC Speed Limit Policy. This sets out quite clear requirements in terms of frontage development and average vehicle speeds to justify a change to the existing Traffic Regulation Order and extend the 30mph speed limit. Due to the recorded speeds and absence of frontage development (the proposed development will not alter this matter as a landscaped buffer is proposed along the Pagham Road), it is unlikely that an extension would comply with the Policy. As the junction is designed to current vehicle speeds, the extension is not required to make the access (or development for that matter) acceptable. It is recommended that this aspect is not pursued.

11. There are also a number of existing field gate accesses serving the site. These should be permanently closed as part of the development. Whilst there is the possibility for these to be used for construction purposes, such matters would be controlled as part of the construction management plan.
12. Pedestrian crossing points are shown on the submitted access drawings. In some instances, these do not connect with footway on the opposite side of the carriageway. A condition is therefore recommended requiring details of pedestrian accesses onto Hook Lane to be submitted and approved.

Highway Capacity

13. The previous application included two capacity assessments. The first that accounted for the impact of the development and a second cumulative assessment that included P/140/16 (land south of Summer Lane) and P/134/16 (Land North of Sefter Road). A separate cumulative assessment was requested accounting for all three developments.
14. A further application was also submitted for Church Barton Farm (P/25/17). This includes an additional 65 dwellings and lies adjacent to P/140/16. This application, which is understood to have a committee resolution to permit subject to the s106, was not specifically included in the cumulative assessment. The cumulative assessment however factored in the proposed allocation included within the Arun Local Plan for Pagham; a total of 1,200 dwellings. As such, the impact from Church Barton Farm was also effectively considered.
15. The situation with these sites is now different given that P/140/16 is approved, and P/134/16 and P/25/17 have committee resolutions to permit subject to the s106 being signed. As such these applications are taken as consented. A revised cumulative assessment is therefore unnecessary. The mitigation identified within the previously agreed cumulative assessment is though still appropriate. The mitigation within this was developed to account for all of the Pagham sites.

Trip Generation

16. In terms of the individual assessment, the application description is noted as including reference to 4,000 square metres of D1 land use. This includes a 2FE primary school. The submitted TA includes a brief comment on these land uses stating that trips associated with the D1 use will be generated by the development (and thus internal) or already on the road network and transferred from other similar uses. It is also understood that the preferred location of the 2FE school required to meet the needs of the proposed Pagham Local Plan Allocation is as part of P/140/16 South of Summer Lane. On this basis, a school site is understood not to be required at Hook Lane.
17. For the D1 use, it's accepted that a small number of trips may arise from the development itself. The majority are likely to originate outside the site however. At the very least, the expectation would be that the development would result in additional trips through the site access junctions and those in the immediate proximity. The TA should therefore identify a trip rate associated with this use. The need to formally model these trips through

nearby junctions would be agreed with the applicant once the actual trip rate has been determined. It is recognised in these respects that the majority of nearby junctions are forecast to work well within theoretical capacity and therefore can accommodate additional trips.

18. Notwithstanding the consideration of the D1 uses within the TA, vehicle trip generation for all uses within the development has been based upon TRICS. TRICS is a large database containing traffic surveys of other completed developments. The database can be refined so as to use only those completed development comparable to that proposed. The use of TRICS is an accepted means of estimating vehicular traffic arising from new developments. TRICS has been used for a number of developments in the local area, including those under consideration at Summer Lane and Sefton Road.
19. For the residential use, the TRICS assessment assumes a 100% private market all house development. In reality, the development will include an element of affordable dwellings and apartments. It is recognised that private market units generate more movements than affordable or flatted units. It is considered that trip generation used within the assessment is robust.
20. Based on the TRICS assessments, the development is forecast to generate,

	AM Peak			PM Peak		
	Arrivals	Departures	2 way	Arrivals	Departures	2 way
300 units	40	101	141	84	50	134
80 bed care home	6	4	10	6	9	15
Total	46	105	151	90	59	149

Future Year Scenarios

21. The capacity assessments have been undertaken in various scenarios to determine conditions in a base year (2017) and to determine conditions in a future year (2031) without and with development. The future year assessment include consented developments (namely 90 dwellings at land north of Summer Lane (P/58/15) and 40 dwellings at 241 Pagham Road (P/125/14)) that have not yet commenced.

Future Year Traffic Flows

22. In order to determine traffic flows for the future year, two techniques have been used. For junctions on the strategic roads/routes, flows have been extracted from the Arun and Chichester area transport models (referred to as SATURN flows). These models having been created to determine the impact of the planned growth within the respective authority's Local Plan. Flows from the strategic models have been used for the Pagham Road/Lower

Bognor Road, B2166 Vinnetrow Road Roundabout, B2145/B2166 Lagness Roundabout, and junctions onto the A27.

23. The strategic models don't cover all junctions. For all others (referred to as local junctions), an alternate approach is applied. This approach applies a growth rate taken from TEMPRO, which uses data from the DfT's National Trip End Model, to surveyed traffic flows to determine the future year traffic flows.
24. It's accepted that the future year flows derived by both means will account for growth planned within the respective authorities Local Plans. For Chichester, the Local Plan is currently under review. As this is only at the consultation stage, limited weight is afforded to this.

Development Trip Distribution

25. Traffic arising from the development has been distributed using Census Journey to Work data. This data is based on existing travel to work habits from residents within Pagham. It is recognised that this data covers trips to work only. Trips for other purposes are though expected to follow this distribution given the route choices available. The use of Census data is an accepted means of distributing trips.
26. There is the matter of the proposed layout influencing which access development traffic may use. No traffic distribution diagram for the development only is included within appendix H of the TA so it is unclear what assumptions have been applied. In principle, traffic is likely to use the most convenient access based on the end destination and in light of the development accesses all working within capacity it is unlikely to matter which access is used. It is possible from the traffic models for the site accesses to determine routing. However looking at these, the number of trips entering and exiting the development exceeds the total number of trips forecast via TRICS. This isn't necessarily an issue, the distribution AM and PM peak development only distribution diagrams should be provided.

Junctions Assessed

27. Taking into account the proposed trip generation and distribution, the following junctions have been formally assessed,
- Sefter Road/Pagham Road priority junction
 - Hook Lane/Pagham Road priority junction
 - Hook Lane/Sefter Road priority junction
 - Grosvenor Gardens/Rose Green Road/Carlton Avenue staggered priority junctions
 - Nyetimber Lane/Grosvenor Road/Rose Green Road traffic signals
 - Gossamer Lane/Aldwick Street/Aldwick Road roundabout
 - Pagham Road/Nyetimber Lane priority junction
 - Pagham Road/Lower Bognor Road priority junction
 - B2166 Vinnetrow Road roundabout
 - B2145/B2166 Lagness Road roundabout
 - A27 Whyke Road roundabout
 - A27 Bognor Road roundabout
 - Hook Lane development access

- Pagham Road development access

28. WSCC are not commenting on those junctions onto the A27. These junctions are the responsibility of Highways England.

Junction Capacity

29. From the capacity modelling outputs and notwithstanding the potential need for some of these junctions to be remodelled to account for the D1 use, it is apparent that even with the development, the significant majority of junctions on the local highway network would continue to operate well within theoretical capacity. Three junctions are forecast to operate close to or over capacity with the proposed development. These junctions will be close to or over capacity without the inclusion of the development traffic. The additional impact of the development should be viewed against the base/without development scenario.
30. The priority junction of Pagham Road/Sefter Road is indicated to be operating over theoretical capacity in the future year without the inclusion of the proposed development. Whilst queues and delays will increase with the development, these increases are not considered to be severe. As referred to above, it is recommended that a sensitivity test be undertaken for this junction given route availability for traffic exiting or entering the development.
31. Certain arms of the signalised junction of Grosvenor Gardens/Gossamer Lane/Nyetimber Lane again are indicated to operate over capacity without the inclusion of the development traffic. With the development, the increased queues are anticipated in both the AM and PM peaks. The impact of this development alone is not considered to be severe taking account of the base situation. A scheme of retiming the sequence of the traffic signals has been put forward as part of previous cumulative modelling work. This retiming would improve the operation of the junction, thereby mitigating the impact of all three Pagham developments.
32. The priority junction of Pagham Road/Lower Bognor Road is also indicated to be operating close to (in the AM peak) or over capacity (in the PM peak) in the future year assessment without the proposed development. With the development, the operation of the junction deteriorates further with significant queues and delays.
33. In this situation, it is acknowledged that the model becomes increasingly unstable as capacity is exceeded. There is also an acknowledgement that it is more than likely that non-development traffic is transferring to use Lower Bognor Road given traffic conditions on other routes, notably the A259. Given also land constraints, there is also an inability of the Hook Lane development to put forward and deliver an appropriate mitigation scheme that would fully resolve the impact of the development.
34. Through the cumulative assessment work prepared for the three Pagham sites, a scheme of mitigation was agreed. This comprised a contribution (based on a theoretical roundabout improvement that could only be

implemented with 3rd party land) towards either a scheme of improvements to the Pagham Road/Lower Bognor Road junction or towards another suitable scheme that may also improve the operation of this junction (i.e. works along the A259 corridor between Chichester and Bognor). This approach would remain applicable for the current application. The agreed contribution (as set out within the agreed statement dated 3rd April 2018) remains at £158.224.

35. It should also be noted that from the cumulative transport assessment, three junction improvements were identified as necessary. Each of the three developments was to undertake one of the improvement schemes. The requirement on Hook Lane was B2166/Vinnetrow Road roundabout. Details of the required improvement do not appear to be submitted in the current application. Details of the required improvement are shown on drawing number 1616/14. This drawing should be submitted in support of the current application with the requirement to undertake the works thereafter included as an obligation in the s106 agreement.

Traffic Capacity Summary

36. The principles of the traffic modelling have been established through P/6/17. For the purposes of the current application, various elements still require consideration. This includes,
- Consideration of trips from the proposed D1 use routing through the site access and other local junctions
 - The provision of trip distribution diagrams showing the development only trips (this should account for trips from D1 uses too)
 - Details of traffic routing in light of the three proposed development accesses

Accessibility by Sustainable Modes

37. The TA includes an assessment of services and facilities within walking and cycling distances. This assessment applies maximum walking and cycling distances (of 2km and 5km) as set out within current national guidance. Using these, it's apparent that there are a number of services within reasonable distance of the site. Due consideration should also be given to the uses proposed within the development that again will assist in meeting the needs of future residents.
38. Limited consideration is given to the nature of existing routes for walking and in particular cycling trips. For walking at least, the site lies adjacent to an existing residential area that includes a continuous series of footways that are lit.
39. For cycling, there are no specific dedicated facilities available. Even so for trips to the east (towards Bognor Regis), cyclists would use existing 30mph, lit, predominantly residential carriageways that have very little change in gradients. For northbound journeys towards Chichester route choice is limited with only the B2166 Lagness Road as an option. Again no dedicated facilities are provided for cyclists although part of this route is signed as the South Coast Cycle Route. Traffic flows and speed limits are recognised as being high as these may act as a barrier to some user groups.

40. There is a WSCC aspiration to create an off-road cycle route between Pagham and South Mundham. This would make use of public rights of way upgraded to an appropriate standard to accommodate all year round cycling, or use existing lightly trafficked roads. Such a route could potentially make use of public rights of way no.100 and 106 located a short distance south of the site and accessed via Summer Lane. Although land involved would lie outside the ownership of the applicants of the current planning application, there is still a demand that would be generated by future residents of this development.
41. In connection with the above, given that residents from P/140/16, P/134/16, and P/6/17 would all make use of the proposed cycle route, proportionate contributions were to be taken from each of the sites. Given the status of P/140/16 and P/134/16, the previously agreed methodology remains applicable. It is therefore considered appropriate for the development to contribute towards an overall improvement scheme. The previously agreed contribution that remains applicable for the current application is £30,612.
42. In summary, whilst gradients are flat, traffic conditions may not be such to encourage cycle based trips amongst certain groups especially towards Chichester. Distance may also be a restricting factor with there being few services within 5km. Based upon distance and traffic conditions, the LHA consider that cycling would be a realistic option for trips towards Bognor Regis. The provision of an off-road route would further increase the potential for trips towards Chichester.
43. The site lies adjacent to the no.600 bus route. This provides a 20 minute Monday to Saturday day time frequency towards either Chichester or Bognor Regis. Services continue into the evening and on Sundays but at hourly intervals. The frequency and journey duration is such that the bus could realistically replace the use of the car for some trips to Chichester or Bognor Regis.
44. Given the nature of the bus service, the applicant should consider what infrastructure improvements could be delivered to further encourage the use of the bus. This could include real time information or improved passenger waiting facilities. The applicant should note that the LHA do not adopt bus shelters; any agreement on the provision and future maintenance of these should be made with the District or Parish Council.
45. Reference is made only to improvements to the existing bus stops at southern end of the development; no reference appears to be made to the possibility of pedestrians using those stops nearer to the Pagham Road/Sefton Road junction. These stops are closer to the development proposed in the northern part of the site.
46. A framework travel plan is provided within the TA. Changes would be required to the draft targets section. These should be amended to suit the draft WSCC Travel Plan policy would require the development to seek a reduction of 15% to the 12 hour vehicular trip rate as derived via TRICS initially. It is recommended that the developer undertakes informal surveys

from once a number of dwellings have been occupied. From this, the TRICS derived targets can then be updated.

47. The effectiveness of the travel plan should also be monitored by way of TRICS Standard Assessment Methodology. Monitoring should be undertaken for a period of 5 years from 75% occupation with surveys in the first, third, and fifth year. It is recommended that the travel plan is secured as a condition. The expectation is then that the above amendments will be incorporated.

48. Paragraph 108 of the National Planning Policy Framework states that the transport system needs to be balance in favour of sustainable transport modes giving people a real choice about how they travel. Paragraph 110 goes on to advise that developments should be located and designed where practical to give priority to pedestrian and cycle movements, and have access to high quality public transport facilities. In principle, the LHA are satisfied that the location of the development would give future residents a realistic choice about how they choose to travel without there being a reliance upon the use of the private car.

Conclusion

49. WSCC has previously assessed and accepted the highways and transport impacts arising from P/6/17. This scheme reflects the application presently under consideration, and as such the principle remains acceptable. There are however certain aspects though that require further consideration. This includes,

- Consideration of trips from the proposed D1 use routing through the site access and other local junctions
- The provision of trip distribution diagrams showing the development only trips (this should account for trips from D1 uses too)
- Details of traffic routing in light of the three proposed development accesses
- An agreement that those contributions and works required to mitigate the cumulative impact of the developments are still proposed. This should include the resubmission of any associated plans.

Ian Gledhill
West Sussex County Council – Planning Services

[REDACTED]

From: Amanda Scholes on behalf of Planning.Responses
Sent: 24 April 2019 10:53
To: Planning Scanning
Subject: FW: Response To Application Number P/30/19/OUT at Land north of Hook Lane Pagham
Attachments: Response_P-30-19-OUT.pdf

-----Original Message-----

From: [REDACTED]
Sent: 23 April 2019 11:44
To: Planning.Responses
Subject: Response To Application Number P/30/19/OUT at Land north of Hook Lane Pagham

Please could the attached response be distributed to the relevant case officer.

Regards

Ian Gledhill

If you wish to reply to this email, please contact the officer directly.