Abingworth Phase 2 Traffic Calming scheme, October 2017: Q & A briefing

1. Context and timings

The various planning approvals for the Abingworth development have always included a requirement that a 'traffic calming scheme' be implemented for the 30mph zone of the B2139. However, that requirement has to be translated into a specific scheme that gets formal WSCC Highways approval via an 'S278' agreement, which is typically a lengthy process involving many statutory consultees.

This traffic calming design, focusing just on the Abingworth 30mph zone of the B2139, has been produced by WSP traffic engineering consultants (commissioned by Abingworth Homes) with a view to early November submission to WSCC Highways and other statutory consultees as the basis of an 'S278' agreement - subject to any amends arising from feedback from the Parish Council. Depending on the nature of feedback from Highways and other consultees, there may further design iterations.

The timeline we envisage is:

- By end of October: PC to provided feedback to WSP and iterated the scheme details to go forward for S278 statutory consultation;
- November 2017: WSP progresses statutory consultations and discussions with Highways. This may include a further iteration at the PC Planning meeting of 26 November;
- December 2017: hopefully, WSCC sign-off to be secured on a design that PC/community are content with
- Early 2018: scheduling of works in Spring 2018.

There are other related developments that we are pursuing that will complement this central calming scheme and produce an overall safer, better-managed traffic situation for Thakeham. This includes: securing a reduced 40mph speed limit on the B2139 over Jackets Hill (see para 3.1 for more on this); also, future diversion of school buses via Abingworth Crescent (the main loop road through the development) so that the main pickup/set-down for the village is safer (see para 3.2 for more on this).

2. The scheme - general design issues

2.1 Changing the 30mph speed limit. WSCC Highways have previously indicated that they oppose reducing the 30mph limit, as this isn't consistent with their Speed Limit Policy (attached as Appendix). The PC and WSP's shared sense is that seeking to introduce this would mean further long delay, and a high chance of rejection of the scheme. The PC's view is that we should progress the pinch point scheme within the current 30mph limit, and then review its effectiveness.

2.2 Number, placement and configuration of pinch-points. WSP's advice is that three pinch points (certainly no more) is appropriate for this zone. There are pros and cons to various options for exact location and configuring of these points. For instance there is a 'common-sense' view that northbound traffic from the south should quickly hit a build-out from the *west* side of the road, and vice-versa, traffic from the north should encounter a build-out emerging from the *east* side of the B2139. Whereas, this proposal has the northern and southern build-outs the other way around in terms of which side of the road they emerge from. However, the key reasons why the design is as proposed are:

a) the two-way effect of pinch points on driver behaviour

The expert advice is not to be too concerned about which side of the road the build-outs are on, as in practice pinch points materially affect the speed of traffic from *both* directions. That is, even if the barrier isn't directly in front of you as a driver, you are aware of the need to watch for oncoming vehicles coming onto your side of the road and you slow down.

b) specific aspects of the southern end of the zone

Having the pinch-point at Stringers Cottage combines useful protection of the southbound bus stop (which is likely to remain a Compass stop even if school buses are eventually diverted around Abingworth Crescent) with creating an enhanced pedestrian crossing at a good point for people crossing to the new pre-school etc. Other location options do not have this strength.

c) specific aspects of the northern end of the zone

The location of the northern pinch-point is hard to disagree, as the bridleway crossing has to be where it is, and this is about the right distance after the 30mph sign. The issue therefore is just which side of the road the build-out should come from. The designer's main reason for the build-out coming from the west side of the B2139 is that this gives best-balanced visibility to pedestrians seeking to cross in either direction. If the build-out was on the eastern side, someone trying to cross from the western side would have compromised sightlines, particularly southwards.

2.2 Potential conflict with residents' driveway access etc.

The designer has sought to minimise this kind of impact, but further discussion of these aspects is natural and to be expected.

There seem to be no issues of this sort relating to the proposed location of the northern bridleway crossing. From the middle-to-southern area south of High Bar Lane there are clearly more issues.

There may be unhappiness relating to southbound vehicles slowing for the pinch-point by Stringers Cottage. The 'waiting zone' of this pinch point crosses the driveways for Stringers Cottage itself, and the White House. Householders both sides of this part of the B2139 may also be unhappy with the idea of cars slowing to an idle in this zone. However, the expert advice is that the traffic data collected in 2016 showed that vehicle volumes at all times of day are sufficiently modest such that in practice we are talking about the great majority of vehicles mainly just slowing briefly before proceeding; a minority will need to stop to give way, but stationery multi-car queues would be rare and short-lived.

In relation to the proposed intermediate narrowing feature just south of High Bar Lane, the thinking is to slow traffic again as it approaches that junction. The placement does not seem to interfere with any driveways, and arguably householders at this point will share some benefit of cars slowing. However, it remains to be seen how this is perceived.

3. Other points

3.1 Reducing the speed limit over Jackets Hill. Although this is outside the scope of the proposals relating to the Abingworth 30mph zone itself, we are also continuing to pursue the extension of the 40mph limit from the northern edge of Storrington over Jackets Hill. WSCC Highways and Sussex Police have indicated that they are open to this, subject to the lower speed limit being supported by vehicle-activated speed signage. Financial commitment to this was secured from Abingworth Homes as part of planning permission granted for the revised phase 2 housing scheme in April 2017. We will continue to progress this in parallel with the core 30mph zone, aiming for implementation in 2018.

3.2 Coach access to Abingworth Crescent. This design commits the developer to further modify both northern and southern Abingworth Crescent jcts to facilitate coach/school bus entry. However, this pass will only to reshape the junction splays to the B2139; the stage of thinking in detail about where where/how school buses might set down on Abingworth Crescent will come later.

3.3 Lighting of crossings. The PC has already indicated in-principle support for appropriate lighting of at least one pedestrian crossing in this zone (and its sense that, at this location, the safety aspect of this outweighs any aesthetic preference for rural roads remaining unlit). Although this scheme does not include any lighting, Oakford/WSP have signalled that they are open to a call for this to come from the

PC. The highest-priority location (if the current scheme proposed is supported) seems to be **appropriate lighting at the Stringers Cottage crossing**. This would need further detailed advice on a design that would balance the safety aim with avoidance of light pollution and glare into neighbouring houses. **Whether lighting is required at the northern crossing should also be considered.**

3.4 Cycling gaps. Unfortunately, although the PC asked for pinch points to feature kerbside gaps for cyclists to progress through, we are advised that this isn't possible given the limited road width and fact that northern and southern pinch points are also pedestrian crossings. Where the cycle-gap feature works elsewhere (e.g. Southwater) the build-outs are not also serving as crossings.

3.5 Improving the unsatisfactory existing pedestrian crossing north of High Bar Lane. This crossing isn't shown in the design at all, and the PC is aware of the need to get this issue acknowledged and produce a proposal for further improvement. Although the proposed intermediate 'narrowing' feature just south of HBL may help, it will still remain a very worrying crossing, and out of tune with the other measures in this scheme. The issue has already been flagged to WSP to think about this and make a suggestion.

3.6 Village Gateway features. These features are being progressed now and should be in place (next to the 30mph signs) well in advance of these works. We have flagged to WSP that this scheme mention these features as 'to be retained', for clarity.

3.7 Proposed removal of existing central road line/studs through the 30mph zone. The explanation for the notes relating to this is that it has been found that central white lines and road studs subliminally influence drivers to feel that they are on a 'main road', and drive faster, hence removal in this kind of situation is recommended.

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Thakeham Parish Clerk

October 2017

APPENDIX: West Sussex County Council SPEED LIMIT POLICY

West Sussex County Council

SPEED LIMIT POLICY (2010)

1. Introduction

1.1 The speed management strategy was adopted in August 2000 and amended in February 2002. The strategy included revised speed limit criteria, supported by Sussex Police, which modified the previous criteria adopted in 1993. Recent guidance from DfT in 2006 has been taken into account in updating the criteria to reflect current views on the setting and evaluation of speed limits. This policy includes criteria for the setting of speed limits. A key objective in the national document is to achieve compliance such that average (mean) speeds are within or close to the set limit.

1.2 Speed limit criteria are used for setting speed limits aimed at responding to speed limit violation and public concern about traffic speed, and contributing towards the overall strategy for speed management as part of the Road Safety Strategy within the West Sussex Transport Plan. The aim is to encourage consistency of setting speed limits throughout the County, to encourage understanding and compliance by drivers. The speed limit criteria incorporate two principal factors for assessment:

- traffic speed (speed assessment)
- character of the route (route assessment)

1.3 Other factors to be taken into account are:

- the length of the route for the speed limit,
- the rate of injury accidents along the route,
- other means of intervention to improve safety.

1.4 The impact of the revised criteria will be to enable more appropriate speed limits where people live, particularly in rural villages, and where there are significant numbers of vulnerable road users*, such as outside schools.

1.5 Speed limits should not be used to attempt to solve the problem of isolated hazards, such as a single road junction or reduced forward visibility such as a bend. The setting of speed limits should avoid departure from evidence based proposals leading to the introduction of inappropriate speed limits which are unlikely to be understood or complied with by drivers. This would result in increased numbers of drivers exceeding the posted speed limits, thereby breaking the law, and causing excessive resource implications for enforcement.

*Note: Vulnerable road users include pedestrians (particularly children, the elderly and disabled), cyclists and equestrians.

1.6 However County Councillors consider that not enough is being done to address the concerns of residents in villages. Therefore at the County Council meeting on 12 February, 2010, Councillors voted to amend the policy. The decision was to:-

- **promote the aim to have 30mph in all villages**
- **remove the requirement to link the decision to actual speeds**

- **give CLCs more scope and opportunities to recommend lower limits, and**
- **give priority to villages with an existing 40mph.**

1.7 The following policy and criteria reflects the national guidance, except relating to villages with 40mph limits where the decision referred to in 1.6 above gives CLC the option to over-ride it in order to promote a 30mph limit.

2. Revised Criteria- Assessment

2.1 Speed Assessment.

The average (mean**) speeds appropriate for each speed limit are shown in Table 1. Note that the measurement of the existing average speed is rounded down to the nearest whole number before applying the specific criteria. (For example an average speed of 41.9 mph or less would qualify for a 40 mph limit).

Table 1 SPEED ASSESSMENT

Speed Limit	60	50	40	30	20
Average Speed to be **below**	62	52	42	33	24

***Note: The term "mean speed" is a statistical reference and to avoid being over technical the term "average speed" is used instead.*

2.2 Route Assessment

The route assessment is attached as Table 2 below. Key features are:

- For a 20mph limit, existing average speeds should be within the criteria, or measures should be provided to ensure that the criteria are met for the new limit.
- For a 30mph limit there should be at least 30% of the route length with frontage development on both sides of the road, or 50% of the route length with frontage development on one side of the road. In villages this may be interpreted as at least 20 properties having direct, individual access along the route (within a length of 600m or 400m, see Route Length Assessment below).
- For a 40mph limit there should be some frontage and/or frequent bends, junctions or accesses with regular daily use indicating a degree of potential conflict along the route.
- For a 50 mph limit there is no specific requirement for frontage access. Routes would be of a rural or suburban nature with few vulnerable road users present.

2.3 Route Length Assessment

The recommended minimum route length for a speed limit is 600m. In exceptional circumstances this may be reduced to 400m, for example when considering a compact village location along a route, or where appropriate as a "buffer" length to provide a transition to a much lower limit. If a buffer length of intermediate limit is provided,

the maximum recommended length is 800m. Where multiple changes of speed limit occur along a route, intermediate lengths should not be less than 600m. The objective should be to achieve a balance between providing reasonable consistency of speed limit along the route and the need to encourage awareness of lower speed limits appropriate for key sections of the route where risks are higher.

2.4 Injury Accident Rate

Routes with persistently high numbers of injury accidents will continue to be assessed for speed management including lower speed limits where other measures alone are insufficient to improve road safety. The existing weighting system (3 for fatal, 2 for serious, and 1 for slight injury) will continue to be used in assessing the "weighted casualty rate per kilometre". Route lengths with the highest weighted casualty rates per kilometre will be given priority for consideration of lower speed limits. In addition the "risk rating", measured as the number of fatal and serious accidents per billion vehicle kilometres, will also be considered when assessing priorities for intervention.

3. Intervention and Application of the Criteria

3.1 If the assessment criteria are not directly met the following factors may be taken into account:

- When the frontage aspect of the route assessment criteria is not met, but the area is of a sensitive or special nature or where there is significant risk to vulnerable road users, and the speed assessment criterion is met, then a lower limit may be considered.
- When the speed assessment criterion has not been met, but the route assessment criteria are met, if associated engineering or other speed reducing measures can be implemented to bring down average speeds sufficient so that the speed assessment criterion is met then a lower limit can be implemented.

3.2 A site would meet the criteria for a speed limit if:

- the speed assessment criterion (Para. 2.1) is met; or
- any necessary additional measures can be funded and implemented to ensure that the speed assessment criterion is met;
  and
- the route assessment criterion (Para. 2.2) is met;
  and
- the route length assessment criterion (Para. 2.3) is met.

3.3 Subject also to 3.2 above, a high casualty rate (see 2.4 above) would contribute to the justification of a lower limit of 50 mph, or exceptionally 40 mph, on rural roads.

3.4 Due to the decision, referred to in 1.6 above, CLCs may promote a change from 40mph to 30mph in villages without associated engineering measures which would otherwise fall outside of these criteria.

4. Advisory Limits

4.1 Advisory limits will only be used where formal (legal and enforceable) speed limits are not appropriate, or as part of a trial package of measures for speed management purposes. All advisory limits will require specific Cabinet Member approval, and will usually be limited to the following:

- Temporary speed limits implemented for safety reasons in advance of a permanent formal speed limit;
- School safety zones, where advisory limits of 20mph or 30mph may be applied in association with appropriate safety zone signing;
- When used as warning signs for specific hazards, used in accordance with national guidance and as part of a road safety scheme.

4.2 Where advisory limits are applied the speed limit criteria may be relaxed from the values in Table 1 by the addition of 3mph to the normal values. (For example, an average speed of 26.9 would be the maximum for the assessment and application of a 20mph advisory limit.)

March 2010

Table 2 ROUTE ASSESSMENT

SPEED LIMIT / CHARACTER OF ENVIRONMENT	TYPE AND CHARACTER OF ROAD AND TRAFFIC COMPOSITION
20 mph Speed Limit or Zone	
Access and local distributor roads. Residential, housing estates, shopping streets or routes near schools may be considered.	Either engineering measures have been undertaken to ensure that the average speed will be below 24 mph or the existing conditions control speed sufficiently. High proportion of vulnerable road users*.
30 mph Speed Limit	
Built up / partially built up areas. Properties with frontage access, e.g. schools, private and commercial premises. Proportion of route length with frontage / access usually exceeding 30% on both sides of the road, or 50% on one side of the road. May include less developed lengths between 30 limits which are too short for a higher limit.	(i) Urban streets. (ii) Roads through villages and identified rural settlements. Significant numbers of vulnerable road users*.
40 mph Speed Limit	
Partially built up areas with limited frontage access, or route lengths with frequent bends, junctions or accesses. May include undeveloped lengths between existing speed limits of 30 and 40, 40 and 40, or 40 and 50mph which are too short for a higher limit.	(i) Urban distributor roads. (ii) Roads through villages and identified rural settlements. (iii) Lengths of rural road identified as high risk and/or having high accident rates. A noticeable presence of vulnerable road users*.
50 mph Speed Limit	
Limited development and frontage access.	(i) Suburban or rural single carriageways. (ii) Suburban dual carriageways with frequent junctions, or frontage / development access. (iii) Lengths of strategic rural roads identified as having high accident rates. Few vulnerable road users*, or segregated crossing facilities, or controlled crossing facilities with appropriate speed management measures.
60 mph Speed Limit	
Limited development and frontage access.	(i) Suburban or rural single carriageways. (ii) Suburban dual carriageways with frequent junctions, or frontage / development access. Few vulnerable road users*, or segregated crossing facilities.

Note: * Vulnerable road users include pedestrians (particularly children, the elderly and disabled), cyclists and equestrians.