THE CRANBROOK PLAN

Examination
Hearing Statement – Additional Highway Detail / Sustainable Transport
Questions AQ17 and AQ18

September 2020

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The Cranbrook Plan

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rpsgroup.com

Additional Highway Detail / Sustainable Transport Questions AQ17 and AQ18

1.1 AQ17. Are there any comments or views to take into account from the clarity provided in table 3.10 relating to Section 278 costs relating to highway improvements relating to London Road?

N.B. This response has been provided principally by PHSW Transport consultants Vectos who will be available at the Examination to address the issues. Their response focuses mainly on the Cobdens elements of the costs and associated issues, although does address wider points of relevance.

Attached at Appendix 1 is a summary technical review of the information available in relation to the proposed S278 costs relating to highway improvements along London Road. It is a high-level review of costs considering the detail where it is provided or from experience against typical schemes where the details have not been provided but the general junction form is known. The details and costs have been obtained from PSD24 – Infrastructure delivery plan July 2020, the most recent evidence base document prepared and submitted for the Examination

1.1.1 The S278 costs can only be considered indicative at this stage as the drawing (EDDC Indicative Drawing B3174 Junction Requirements) from which the S278 costs have been calculated show the location of possible types of infrastructure proposals only, but doesn't include any form of scheme arrangements/designs from which costs could be calculated accurately.

1.1.2 The proposed highway improvements identify a number of schemes along London Road but it is likely that some of these scheme types would evolve as the design process moves forward and the need for some of these schemes is questionable as described below. There is also little justification relating to the provision of each of these schemes. Also, the overall scheme package doesn't seem to be consistent in terms of improving the whole length of London Road within Cranbrook.

1.1.3 A roundabout is proposed as access to the Cobdens expansion area (Item L, cost £1.832m). Roundabouts require significant land take, have high construction costs and can create barriers to pedestrian and cycle movements. Smaller scale interventions including priority t-junctions or signallised junctions would be a more cost effective and efficient way of providing access to the Cobdens expansion area and these junction types would better support the provision of active frontage on London Road and pedestrian/cycle movements along London Road. Although a roundabout could be used to reduce vehicle speeds on London Road, the provision of active frontage in association with access junctions, pedestrian crossings and a downgraded highway route on London Road would in itself reinforce lower vehicle speeds and create a more sympathetic urban form.

1.1.4 There is also provision for a further access to the Cobdens expansion area (Item J, £625,00) described as a low speed (20mph design standard) staggered cross roads and therefore combined with the roundabout costs described above, the S278 costs relating to Cobdens access are likely to have been overestimated.

1.1.5 There is provision to upgrade London Road (Item Upgrading of London Road between I and L, £1.9m and associated London Road service diversions, £1,37m) along the frontage of the Cobdens expansion area and it would be expected that this would involve downgrading the highway in terms of reducing vehicle speeds and providing improved facilities for pedestrians and cyclists along this section of highway. However, cycle design guidance has recently been updated (DfT Cycle Infrastructure Design, Local Transport Note 1/20 dated July 2020) and the infrastructure required to meet this guidance in terms of land take burden and construction costs has increased.

1.1.6 Although there is provision to upgrade London Road along the frontage of the Cobdens expansion area, there is no provision for similar interventions further to the west that would provide continuous footway and cycle facilities along the length of London Road through Cranbrook. Therefore, there is a gap in infrastructure provision along London Road.

1.1.7 There is also a road closure cost for Cobdens Lane (Item Road closures - Station Road, Gribble Lane and Cobdens Lane, £82,000) which may not be needed, it may be achieved through good design and masterplanning instead.

1.1.8 A pedestrian bridge is proposed (Item C, £2.856m) between the Treasbeare & Bluehayes expansion areas and although this is not related to the Cobdens expansion area, this is a significant infrastructure cost. The supporting evidence in the IDP states that the B3174 “has the potential to provide a barrier between north and south” and that it is “possible that 4 lanes would need to be crossed and provision of a bridge is considered a requirement”. It is therefore not clear if four lanes are required and therefore also whether the bridge would be required. Indeed, it is our view that, given that there is significant development on both sides of London Road that issues of severance need to be addressed before working towards a solution that creates other barriers to pedestrian amenity and safety and is not a contemporary solution to good urban planning.

1.1.9 We understand that the provision of four lanes would remove the existing bus lane on the B3174 and therefore we would queston whether the provision of four lanes on the B3174 is consistent with the following objectives set out on pages 8 and 9 of the Cranbrook Plan Submission Draft (Cran001):

- Objective 14: Encourage and enable residents to minimise their carbon footprint by reducing the need to travel; but where necessary, to travel using sustainable means, comprising the use of public transport, walking and cycling.
- Objective 16: The majority of journeys originating from Cranbrook are made using sustainable transport.
- Objective 17: An integrated, coordinated transport system enabling people to move easily within Cranbrook, to neighbouring settlements and employment centres and beyond.
- Objective 18: An excellent network of safe walking and cycling routes in and around Cranbrook making active transport the first choice.

1.1.10 Furthermore, page 2 of the Devon County Council Statement: Revised request for public transport S106 contributions from the Cranbrook Expansion Areas (PSD26) states that “there is a focus on public transport measures to provide extra transport capacity and mitigate the impact of Cranbrook expansion area development on the east-west corridor” and “DCC is seeking

contributions towards sustainable infrastructure to encourage a significant shift to non-car modes. Central to this are improvements to public transport."

1.1.11 Also, much of the evidence used to develop the highway infrastructure is dated. Rather than adopt a predict and provide approach in highway terms which was based on historical trends that reflected policies designed to accommodate future increases in traffic, a vision and validate approach would be more desirable where the infrastructure is provided to meet the future vision and policy requirements of the area, principally to prioritise classic mobility and shared travel above vehicle capacity.

1.1.12 The provision of four lanes and the removal of the existing bus lane may affect the success of the Plan (in achieving its objectives) and the DCC aim of encouraging a significant shift to non-car modes. Therefore, the need for a pedestrian bridge and removal of the proposed bus lanes should be questioned.

1.2 AQ18. Is the revised position of Devon County Council in relation to sustainable transport contributions justified in the light of the available evidence? If it is not, what evidence do you rely on to support your comments?

1.2.1 The DCC S106 transport request (June 2018) requested a contribution of £8,380,000 towards enhancing public transport provision to Cranbrook, to be used flexibly to help deliver a package of measures including enhanced bus services, enhanced rail frequency and a second rail station.

1.2.2 The DCC revised request for public transport S106 contributions (July 2020) includes evidence that describes that a second rail station would now need two platforms instead of one and hence its costs would increase significantly and therefore its delivery would be delayed.

1.2.3 Due to the delay in delivering a second station, alternative public transport measures are now proposed to mitigate the impact of not providing the second rail station and a significant upgrade to bus services is now proposed instead.

1.2.4 It is now proposed to provide a bus service with a ten-minute frequency during the day with a twenty-minute frequency in the evening and a twenty-minute service on a Sunday. DCC have calculated that an additional eight buses are required to deliver these services although detailed calculations haven't been provided to demonstrate how this has been derived. However, the cost of £130,000 per each addional bus per annum is considered reasonable. In addition to increasing bus services, £250,000 is requested for 2nd Cranbrook Station feasibility work.

1.2.5 It would be expected that these bus enhancements provide significant focus on Cobdens and The Grange ensuring high frequency connections are provided between these sites and the existing railway station. We would also suggest that more flexible demand responsive transport options are considered.

1.2.6 A summary of the DCC S106 public transport contributions is shown in the table below.

	2018	2020	Change
DCC S106 Public Transport Request	£8,380,000	£6,378,000	£2,005,000

1.2.7 It is shown above that the DCC S106 public transport contribution has reduced by £2,005,000 from £8,380,000 to £6,378,000.

APPENDIX 1 – CRITIQUE OF CRANBROOK PLAN HIGHWAY COSTS

THE CRANBROOK PLAN

Examination

Hearing Statement – Sustainable Transport

Appendix 1 Highways Costs Critique

September 2020

Prepared on behalf of Persimmon Homes South West

This Appendix includes a summary technical review of the information available in relation to the proposed S278 costs relating to highway improvements along London Road. It is a high level review of costs considering the detail where it is provided or from experience against typical schemes where the details have not been provided but the general junction form is known. The details and costs have been obtained from PSD24 – Infrastructure delivery plan July 2020, the most recent evidence base document prepared and submitted for the Examination.

The table below includes the broad location of junctions or infrastructure proposed, a description of the works, the proposed cost of the works and the technical summary review from Vectos on the proposed costs.

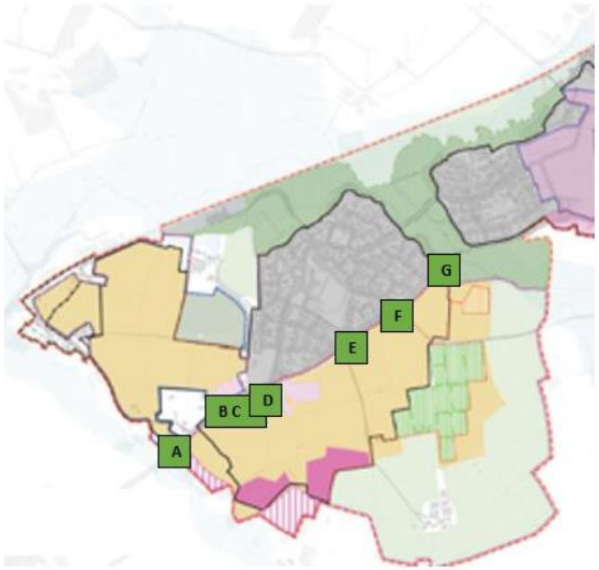
In summary, it's not possible to provide an accurate view on costs as scheme details are limited and haven't been agreed at this stage. With the information that is available and the proposals put forward, the total costs generally (in relation to typical junction forms) are considered to be broadly within the expected range (some costs are a little high or low). There are questions on the need for items C (Bridge between Treasbeare and Bluehayes) and item L (Roundabout Junction at Cobdens), the justification of which is set out in the main body of the Hearing Statement against AQ17.

Junction/Scheme (Junction ref as per those in PSD24)	Location	Description of Works	Proposed Costs	Vectos Review of Costs
A	Access for Bluehayes & Treasbeare	New cross roads	£625,000	Both items seem reasonable based on design as shown on 'Indicative Scheme Drawing' plan.
A	Access for Bluehayes & Treasbeare	Signalisation	£244,000	
B	Roundabout access to Bluehayes	New 3 arm roundabout	£1,832,000	Seems high for a 3-arm roundabout unsignalised, although there does appear to be level issues on the south side to deal with.
C	Bridge between Treasbeare & Bluehayes	New pedestrian bridge (items 5 and 6 in IDP)	£2,856,000	No comment, very much depends on the form/type of structure. Question it's need, better solutions via at-grade crossing at significantly lower cost.
D	Additional arm on existing roundabout for Treasbeare access	Enhanced existing roundabout with fourth arm added to serve Treasbeare expansion area	£163,000	On review of 'Indicative Scheme Drawing', this figure appears light considering the works to enlarge the existing roundabout.
D	Pedestrian Crossing	Pedestrian crossing facilities	£20,000	OK.
E	Toucan crossing between Treasbeare & existing Cranbrook	Pedestrian and cycle crossing point (provide a toucan crossing)	£149,000	Slightly high but OK.
F	Improvement of existing roundabout to provide access to Treasbeare	Enhancement to existing roundabout (4th arm to be enhanced)	£102,000	Appears Ok.
F	Improvement of existing roundabout to provide access to Treasbeare	Pedestrian crossing points	£82,000	OK.

G	Pelican crossing	Provide enhanced pedestrian crossing point as pelican crossing	£129,000	OK
H	Toucan crossing and closure of Gribble Lane	Gribble Lane closed to vehicular traffic and toucan crossing provided at this location to provide safe links to the sports hub located in Cobdens expansion area	£177,000	Slightly high but OK.
I	Access to Farlands	T junctions	£176,000	Appears OK.
J	Access to Cobdens and Grange	Low speed (20mph design standard) staggered cross roads	£625,000	Seems high, but very much depends on the traffic calming features that would need to be included (junction tables?).
K	Grange access	Provision of T junction to serve as secondary access to Grange	£176,000	Appears ok, depending on length of right turn lanes etc.
L	Cobdens roundabout access	New three arm roundabout to provide access to Cobdens lane and the Cobdens expansion area	£1,860,000	Seems high for a 3-arm roundabout unsignalised. Question whether this is needed. Potential for simple T-junction and incorporate with upgrading of London Road.
		Road Closures – Station Road, Gribble Lane and Cobdens Lane	£82,000	OK.
		Upgrading of London Road between A and B	£353,000	OK.

		Upgrading of London Road between I and L	£1,900,000	Much dependent on the design but appears high. Length is 560m so even if you rebuilt the road (assuming WS2) at £2,000 per linear metre (which is a high figure for this type of road) you would still only come out at £1.2m.
		London Road Service Diversions	£1,370,000	Unknown.

Reference Plans (extracts from PSD24);



A – New signalised cross roads

– Note Station Road to be closed to vehicular traffic

B – New 3 arm roundabout

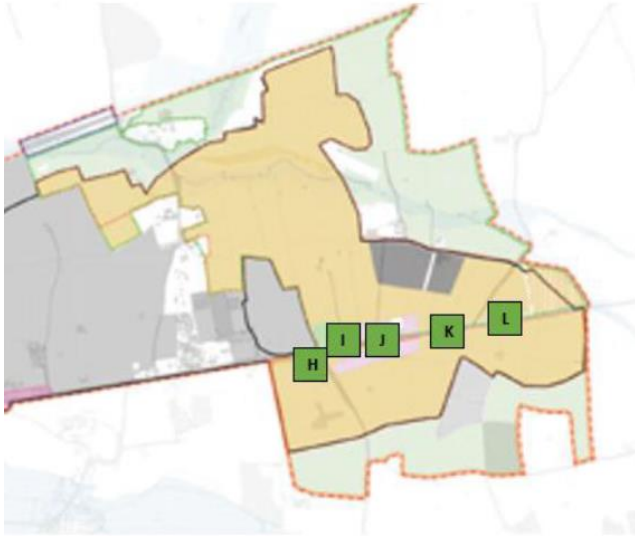
C – New pedestrian bridge (items 5 and 6 in IDP)

D – Enhanced existing roundabout with fourth arm added to serve Treasbeare expansion area with pedestrian crossing facilities/refuges

E – Pedestrian and cycle crossing point (provide a toucan crossing)

F – Enhancement to existing roundabout with pedestrian crossing refuges (Currently 4 arms with southern arm to minor road. 4th arm to be enhanced)

G – Provide enhanced pedestrian crossing point as pelican crossing



H – Gribble Lane closed to vehicular traffic and toucan crossing provided at this location to provide safe links to the sports hub located in Cobdens expansion area

I – Provision of T junction

J – Low speed (20mph design standard) staggered cross roads with parallel pedestrian crossing provision

- Close junction into Cobdens Lane

K – Provision of T junction to serve as secondary access to Grange

L – New three arm roundabout to provide access to Cobdens lane and the Cobdens expansion area