

Cambridge Road, Quendon

Comments received from the Validating Engineer at Essex County Council

The formal validation for the Quendon traffic calming has now been completed and the validating engineer has broken down his comments into the different type of measures as summarised below:

The B1383 is a mostly straight, two-way single carriageway, is street lit and is classified as a PR1 in Essex's Functional Route Hierarchy. There is good pedestrian provision throughout the village.

The existing 30mph is believed to be unenforceable given the spacing between the existing street lighting and additional repeater signage. It is recommended that back-to-back repeaters be installed at the VAS toward the northern end of the village and near the Kings Head public house and appropriate order created if not already done so.

The nature of Cambridge Road varies along its length, in some locations being inappropriate for a 30mph limit and which is most likely the cause of speeding. Visibility to the speed limit terminals signs is good. Seven-day traffic count data show average and 85<sup>th</sup> percentile speeds in the more a-typical village setting where properties bound the road as 28.2mph and 31.3mph respectively. Where properties were fewer and/or set back from the road, average and 85<sup>th</sup> percentile speeds increased to 35.2mph and 39.3mph, above the NPCC enforcement threshold (35mph).

Yellow backed speed limit repeater signs and vehicle activated signs have already been installed, presumably in an attempt to reduce the speed of vehicles travelling through the village. It is also proposed to install a 40mph buffer at the southern end of the village this year (currently subject to CMA).

Drawings 6481.001 to 005 were produced by Stuart Michael Associates and have been reviewed against Essex's Speed Management Strategy.

### General

- Rumble strips – It is proposed to lay a series 3, 6 and 9 yellow bar markings, Dragon's teeth and buff surfacing with 30mph carriageway roundel on the approaches to and at the terminal signs. Forward visibility to the terminal signs is good therefore speeding would appear to be a bi-product of the road being straight, houses set back etc. Road users are seemingly understanding the reason for the limit rather than being unaware of the limit therefore the proposals are contrary to the advice given in Essex's Speed Management Strategy. The bar markings are not permitted in TSRGD & would constitute a maintenance liability in addition to setting precedent for other requests.
- Narrowing of the existing running lanes to 3.0m with a combination of build-outs with informal pedestrian crossing points and centre hatching including buff coloured surface infill. Coloured surfacing materials are costly and have poor longevity and are to only be used where the site is classified as a casualty reduction site in accordance with the Speed Management Strategy. A single slight Personal Injury Collision was recorded in the latest 3 year period ending 30<sup>th</sup> September 2020 therefore use of coloured surfacing would not be appropriate. Three-metre wide running lanes are acceptable as traffic counts indicate HGVs account for only 1% of vehicles (approx. 10,000 AADT as of 2017). It is proposed to replace the centre line with hatching (minimum 800mm width) that would visually narrow the carriageway discouraging overtaking but will take away from the village feel. The carriageway is currently surface dressed therefore is likely to become damaged in removal of the markings. There are currently no planned carriageway surfacing works at this location.
- Use of buff colour surfacing as a gateway treatment in co-ordination with 30mph carriageway roundels and at two informal pedestrian crossing points. Again, this is a maintenance liability and is not permitted under Essex's Speed Management Strategy. There is no justification for highlighting the crossing point as it takes away the onus from the pedestrian on when it is safe to cross. Visibility from the two crossing points to oncoming vehicles is good and the carriageway at both locations was only 6.8m wide. The carriageway is 6.4m and 6.3m at the north and southern end village gateways respectively.

Site specific measures:-

1. Extension of the footway, build-outs and informal crossing point outside Red Brick Cottages.

A new section of footway has been recently constructed here but with a verge area between the carriageway and footway not as shown on the drawings. Underground utilities permitting, a return may be added including drop kerb. However, the carriageway measures only 6.1m at this location which would prevent construction of a pair of build-outs.

2. Widening of the footway outside the village hall.

The appendices from consultants report contains Essex highway boundary maps that have been overlaid on to the drawings. The condition of the existing path would merit full reconstruction as well as widening subject to the presence of any shallow underground utilities.

3. Construction of a pair of build-outs outside Rose Bush Cottage.

The carriageway is approximately 8.1m wide, therefore assuming a 6.0m carriageway would result in two 1m buildouts. There appears to be a highway drain on both sides of the road so additional gulleys are required up stream to remove surface water.

4. Construction of a traffic island within the proposed centre hatching outside Manor Stables.

The carriageway is 7.2m wide leaving adequate space for a 1.2m traffic island assuming 3.0m running lanes. The proposed traffic island is approximately 60m from the nearest street light. A 1.2m island is insufficient for high mast signs therefore the only protection would be the hatching and smaller bollards

on the island. There are no immediate concerns but obviously, the scheme would be subject to the Road Safety Audit process as part of the design. In addition, narrowing of the running lane to 3.0m would prevent agricultural vehicles from passing without over-running the footway.

5. Potential buildouts and drop kerb crossing between the two PRoW footpaths.

The carriageway is 6.7m wide therefore buildouts would be approx. 350mm wide meaning that they would be more difficult to construct given their relatively small size and of little benefit. Drainage would need to be amended as before. The two PRoW are unbound; there is a sharp incline at the start of the PRoW on the eastern side of the carriageway.

6. Widening of the existing footway between The Old Barn and Norbury into the carriageway (6.0m wide over carriageway over approximately 150m).

A 6.0m wide road over 150m is not acceptable on a PR1 route. The proposal is feasible although it is noted that a number of properties have significantly encroached over the highway boundary to the rear of the existing footway.

7. Construction of a pair of build-outs outside The Norden.

The carriageway is 6.8m wide which would again result in two very narrow buildouts.

8. Construction of a pair of buildouts outside number 2 and conversion of part of the existing footway to create an off carriageway parking bay for residents.

Average & 85<sup>th</sup> percentile speeds were 28.2mph and 31.3mph at this location therefore compliance is much better. The majority properties appear to have

no off street parking therefore currently park on the footway. A minimum footway of 1.3m and parking bay of 2.0m is achievable. There is evidence of highway drainage and Gigaclear. The Gigaclear asset is situated in the middle of the proposed bay and is likely to prohibit construction of a formal parking area.

## **Conclusions and recommendations**

The majority of the route is far more akin to a 40mph speed limit which is reflected in the 7 day speed data and Community Speed Watch survey data. The 30mph limit is applicable by village status only and because the start of the 30mph are clear it would appear that road users do not understand the reasoning for the lower limit.

Proposed measures taken forward to design only:-

- Informal pedestrian crossing outside Reb Brick Cottage
- Addition repeaters in order to make speed limit legal, superfluous repeaters removed and order created if necessary
- Replace centre line with hatching where width permits to be undertaken as part of surfacing works
- Provision of buildout near Rose Bush Cottage
- Provision of traffic island outside Manor Stables
- Footway improvements but a minimum of 6.5m carriageway to be maintained
- Extension of parking bay into footway again allowing a minimum of 6.5m carriageway width

The recommendation therefore is that the proposal is progressed to the detailed design stage and should be taken forward to the Uttlesford Highways Panel when they meet in March to request funding for designing the measures that have been deemed viable.