

Beacon Parishes Traffic Study Phase 2

Site: Beacon Parishes
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1.0 Introduction

- 1.1 Motion has been instructed by the Beacon Parishes Traffic Group (BPTG) to conduct a traffic study within the Beacon Parishes area, to enable the BPTG to develop proposals to address local traffic issues.
- 1.2 Traffic issues in the Beacon villages are a high-profile local concern for the majority of residents and the BPTG has been formed to implement the transport related policies in The Ditchling, Streat and Westmeston Neighbourhood Plan (the NP).
- 1.3 The primary focus of the study is the B2112 through the centre of Ditchling. It is aligned north-south through Ditchling along High Street and South Street and is the busiest route with the greatest volume of traffic, forming a route between the Haywards Heath / Burgess Hill areas and Brighton / surrounding areas. The study also considers other traffic issues within the Beacon Parishes, including Spatham Lane, Streat Lane, Beacon Road, the B2116 Lewes Road/West Street and Underhill Lane. The extent of the traffic study is indicated by the red dashed line in the location plan at figure 1 below.

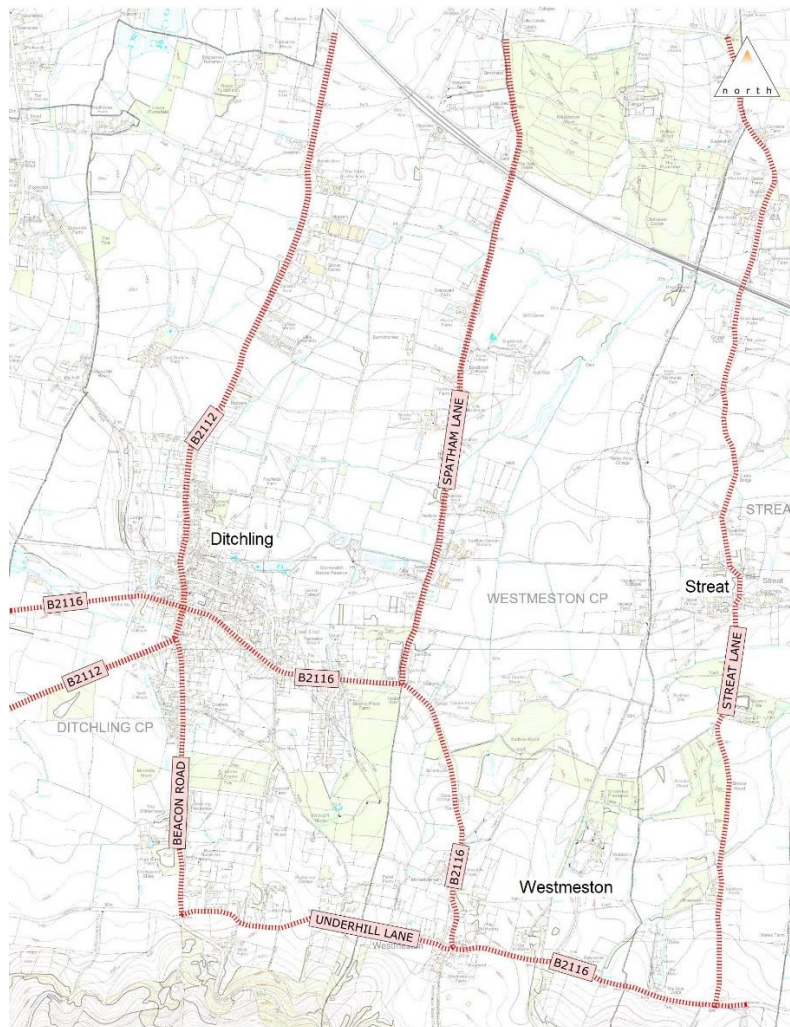


Figure 1 – Location Plan

- 1.4 The traffic study consists of two phases. The first phase was completed in October 2022 and consisted of (i) obtaining automated survey count (ATC) and classified turning count (CTC) data in order to assess the current conditions in terms of traffic volumes / speeds and levels of usage by non-motorised users, (ii) obtaining collision data for the study area, (iii) a site visit; and (iv) providing initial recommendations for traffic calming options or other highway improvement measures as appropriate. The BPTG has reviewed the phase 1 report and provided a response document, setting out which measures should be carried forward into the second phase of work.
- 1.5 This report forms part of the phase two work, which develops the preferred traffic calming and highway improvement options into a set of highway layout drawings with accompanying notes and cost estimates for each option. It was intended that the East Sussex County Council (ESCC) Highways Team would provide input into this second phase of work; however, they have been unable to contribute during the preparation of this work. Therefore, it is anticipated that this phase two report and accompanying drawings will form the basis of future discussions with ESCC as it will be necessary to gain the Highway Authority's support for these proposals ahead of wider consultations with other local stakeholders.

2.0 Suggested Traffic Calming & Highway Improvement Measures

- 2.1 A summary of the suggested traffic calming and highway improvement measures is provided below. An estimated cost has also been provided for the proposals.
- 2.2 The drawings produced for phase two are intended to serve as preliminary drawings for the purpose of establishing the feasibility of the proposals, and for gaining the support of the Highway Authority and other stakeholders before progressing to the implementation stage. At the implementation stage it will be necessary to prepare detailed design drawings for each measure, which will include construction details, material specifications, setting out information / dimensional data and any relevant specifications needed for construction. This detailed design stage will involve obtaining topographical survey data, statutory undertakers record and may involve drainage/lighting/soil surveys.
- 2.3 As part of this study, it has been noted that some the road alignments shown on the Ordnance Survey (OS) mapping for the centre of Ditchling do not appear to match on-site observations (particularly High Street, North End, Lewes Road, South Street and West Street). Whilst OS data is usually sufficiently accurate for the preparation of preliminary highway layout plans, its accuracy can drop to plus or minus 2 metres in rural areas. Given the observed discrepancies in these areas it is recommended that a topographical survey is carried out in these areas to confirm the feasibility of the proposed measures.
- 2.4 An overview of the study area is shown on drawing 1808025-100, with details shown on drawings 1808025-101 through to drawing 1808025-126. The following paragraphs set out an overview of the various measures shown on each of these drawings. Reference should be made to each drawing for further details of these proposals.

B2112 Clayton Rd, South St, High St, North End and Common Ln; including proposals at Ditchling village centre incorporating part of B2116 - West St and Lewes Road

- 2.5 The suggested measures for the B2112 route are set out on drawings 1808025-101 to 1808025-108 and consist of the following:
- ▶ 1808025-101: B2112 Clayton Road
 - New village gateway feature at the 30mph speed limit change, including signage, white posts, roundel marking, coloured surfacing, lining and 'dragon's teeth' markings on the approach. It is intended that the gateway will emphasise the change in character from that of rural road to village environment.
 - New dropped kerb pedestrian crossing point with new sections of footway to tie into the existing Public Right of Way on the northern side of Clayton Road. The northern footway forms a kerbed build-out which acts as a carriageway narrowing to aid traffic speed reduction.

- ▶ 1808025-102: B2112 Clayton Road (and junction with Beacon Road)
 - New kerbed carriageway narrowing with 30mph roundel markings and coloured surfacing; It is intended that the this will encourage motorists to adhere to the 30mph speed limit.
 - Provision of new posts to accommodate a movable vehicle activated sign (MVAS), also known as speed indicator devices (SID). These units are activated when a vehicle approaches above a pre-set speed and are understood to be effective when relocated periodically. Therefore, it is anticipated that a number of posts could be installed at various locations around the area, on the basis that one or two MVAS/SID units are purchased and are relocated at regular intervals.
 - Re-alignment of the eastern kerb at the Clayton Road / Beacon Road junction. It is intended that removing the existing large radius sweeping kerb will discourage vehicles turning left into Beacon Road at inappropriate speeds.
 - New 30mph roundel and coloured surfacing in Beacon Road. It is intended that the this will encourage motorists to adhere to the 30mph speed limit.
- ▶ 1808025-103: Ditchling village centre including B2112 South Street and High Street; and B2116 West Street and Lewes Road
 - New 20mph zone entry signage and roundel markings at South Street and West Street, indicating the entry point to the extended 20mph zone.
 - New speed cushions on South Street and Lewes Road as traffic calming measure to reinforce the 20mph zone.
 - New double yellow lines and marked parking bays to formalise and reduce the provision of on-street parking on South Street. It is suggested that a parking survey is carried out to assess the current on-street parking that is taking place and to determine the availability of alternative parking areas in the village that can accommodate displaced vehicles. It should be noted that the provision of double yellow lines does not prohibit kerbside loading (loading is only prohibited where the yellow lines are accompanied by transverse 'blip' markings on the kerb).
 - Provision of new dropped kerb pedestrian crossing points on the four arms of the village centre mini roundabout. The South Street and Lewes Road crossings incorporate a carriageway narrowing with reflective bollards to act as a traffic calming measure, and the crossing on High Street forms part of a flat top raised table feature, which includes a slight reduction in carriageway width to 4.8 metres, to serve as a traffic calming measure to reinforce the 20mph zone, and to facilitate pedestrian movements around the existing steps attached to the adjacent building at this location. These crossing points and raised table could be constructed using red modular blocks, sympathetic to the existing footway construction materials in the centre of the village.
- ▶ 1808025-104: B2112 High Street
 - Re-alignment of the kerbs to provide a 4.8-metre-wide carriageway, including new double yellow lines and marked parking bays to formalise and reduce the provision of on-street parking on High Street (potentially a blue badge bays if deemed appropriate), to reduce the provision of opportunities for on-street parking (refer to notes above for drawing 1808025-103).
 - New speed cushions as traffic calming measure to support the 20mph zone.
 - New flat top raised table incorporating a dropped kerb pedestrian crossing point, as traffic calming measure to reinforce the 20mph zone. This is located at a natural width restriction in the existing carriageway, which will serve as the entry point to the 20mph zone (with 20mph zone signage and 20mph roundel marking).

- ▶ 1808025-105: B2112 North End
 - New section of footway with reflective bollards to serve as (i) a minor kerb build-out to act as a traffic calming feature and (ii) an improvement to the existing bus stop at this location. The footway includes a dropped kerb pedestrian crossing point.
 - Provision of new posts to accommodate a MVAS/SID.
- ▶ 1808025-106: B2112 North End
 - Alterations to the existing priority build-outs, consisting of a new 1 metre wide cycle lane allowing cyclists to cycle through the build-out instead of giving way to oncoming traffic.
- ▶ 1808025-107: B2112 North End
 - New raised table junction at Dumbrells Court Road to replace the existing priority build-out at this location, intended to address local concern that some motorists tend to speed up as they passes the build-out ahead of oncoming traffic.
 - Provision of new posts to accommodate a MVAS/SID.
- ▶ 1808025-108: B2112 North End
 - New village gateway feature at the existing 30mph speed limit change, including signage, white fencing, roundel marking, coloured surfacing, lining and 'dragon's teeth' markings on the approach. It is intended that the gateway will emphasise the change in character from that of rural road to village environment.

B2116 Keymer Rd and Lewes Road

2.6 The suggested measures for the B2116 route (excluding Ditchling village centre) are set out on drawings 1808025-109 to 1808025-114 and consist of the following:

- ▶ 1808025-109: B2116 Keymer Road
 - New village gateway feature at the 30mph speed limit change, including signage, roundel marking, coloured surfacing, lining and 'dragon's teeth' markings on the approach. The location coincides with the recent Traffic Regulation Order which relocates the pre-existing 30mph speed limit change by a distance of approximately 80 metres to the west. It is intended that the gateway will emphasise the change in character from that of rural road to village environment.
 - New dropped kerb pedestrian crossing point with new section of footway on the southern side to tie into the existing footway to the east (forming a vehicle crossover at The Drove). The existing northern footway is to be widened, forming a kerbed build-out to act as a carriageway narrowing to 4.8 metres width to aid traffic speed reduction. It is acknowledged that this crossing point is offset from the pedestrian desire line between The Drove to the south and Lodge Hill Lane to the north; however, due to existing site constraints it cannot be located further towards the east. The new footway will incorporate a dropped kerb vehicle crossover allowing vehicles to access The Drove.

- ▶ 1808025-110: B2116 Lewes Road
 - New dropped kerb pedestrian crossing point at the existing narrowed priority section to the west of The Fieldway. This crossing is suggested because the southern footway but not continue eastwards beyond this point.
 - New section of footway forming a vehicle crossover at The Fieldway. Given that The Fieldway is an unmade road serving seven dwellings, it is considered this arrangement would be appropriate at this location, to provide a continuous footway facility giving priority to pedestrians. The vehicle crossover will incorporate a dropped kerb allowing vehicles to access The Fieldway.
 - Widening of the existing footway to 2 metres. This section of Lewes Road has no footway on the southern side and the existing footway on the northern side is below the recommended 2 metre width. As a key pedestrian route between residential properties and the school to the west; and the centre of Ditchling to the east, widening of this footway will provide an improvement to pedestrians. It should be noted that existing trees may form a constraint to new footway construction; it is recommended that advice is sought from an arborist should this proposal be progressed further.
 - Reconstruction of the existing traffic calming speed cushions. The existing traffic calming features on Lewes Road appear to be in a deteriorating condition and may benefit from refurbishment or reconstruction works. It is anticipated that East Sussex County Council would have responsibility for maintaining these highway features under its obligations as the Local Highway Authority.
- ▶ 1808025-111: B2116 Lewes Road
 - Widening of the existing footway to 2 metres (refer to notes above for drawing 1808025-110).
 - Provision of dropped kerbs crossing points with tactile paving at minor accesses along the northern side of Lewes Road. As with the suggested footway widening, the addition of these features will provide an improvement to pedestrians, particularly mobility impaired users.
 - Reconstruction of the existing traffic calming speed cushions (refer to notes above for drawing 1808025-110).
- ▶ 1808025-112: B2116 Lewes Road
 - Widening of the existing footway to 2 metres (refer to notes above for drawing 1808025-110).
 - New 20mph roundel marking to reinforce the existing 20mph zone signage.
 - Widening of the carriageway to the east of East End Lane and Nye Lane to accommodate a new dropped kerb pedestrian crossing with refuge island. This will provide a continuous pedestrian facility between the footway on the northern side of Lewes Road (to the west of this location) and the footway on the southern side of Lewes Road (to the east of this location). As part of this work, the footway on the southern side of the road would be widened to 2 metres.
- ▶ 1808025-113: B2116 Lewes Road
 - Widening of the existing footway to 2 metres (refer to notes above for drawing 1808025-110).
 - Provision of new posts to accommodate a MVAS/SID.
- ▶ 1808025-114: B2112 Lewes Road
 - New village gateway feature at the 30mph speed limit change, including signage, white fencing, roundel marking, coloured surfacing, lining and 'dragon's teeth' markings on the approach. It is intended that the gateway will emphasise the change in character from that of rural road to village environment.
 - Widening of the existing footway to 2 metres (refer to notes above for drawing 1808025-110).

B2112 Common Lane

2.7 The suggested measure for the B2112 to the north of Ditchling (near Notcutts Garden Centre) is set out on drawing 1808025-115 and consists of the following:

- ▶ 1808025-115: B2112 Common Lane
 - New reflective marker posts. This measure is suggested as a low-cost measure to improve the delineation of the 'S' bend in the carriageway and is identical to the markers provided at other locations in the local area.

Spatham Lane

2.8 The suggested measures for Spatham Lane are set out on drawings 1808025-116 to 1808025-121 and consist of the following:

- ▶ 1808025-116: Spatham Lane
 - New dropped kerb pedestrian crossing point with reflective bollards on Lewes Road (at the southern end of Spatham Lane), with a new section of footway providing pedestrians with an off-carriageway route for a short distance along Spatham Lane, to the north of the junction. A dropped kerb will be provided for pedestrians to join the Spatham Lane carriageway. This arrangement is intended to formalise the existing informal route created by pedestrian movements at this location.
 - New 'Spatham Lane' gateway feature at the 40mph speed limit change, including signage, white fencing, roundel marking and coloured surfacing. It is intended that the gateway will emphasise the change in speed limit.
 - New white lining to be provided on Spatham Lane at locations where the existing carriageway width exceeds 4.8 metres. Providing white lining at 4.8 metres will create the visual effect of a narrow 4.8-metre-wide carriageway at these locations, encouraging motorists to adhere to the new 40mph speed limit.
- ▶ 1808025-117: Spatham Lane
 - New 40mph repeater signs and roundel markings. It is recommended that 40mph repeater signage is placed within 250 metres of the terminal signs at the gateway, and then at intervals of 350 metres to ensure that drivers are fully aware of the speed limit in force.
 - New section of footway with reflective bollards at the location where the existing steps on the Public Right of Way to the west descend onto the Spatham Lane, providing an off-carriageway landing at the bottom of the steps for pedestrians. Reflective bollards will ensure that the feature is conspicuous to motorists.
 - New conspicuous signage indicating the Public Rights of Way.
 - New sections of footway to accommodate new rural timber bus shelters at Stoneywish Nature Reserve.
 - It is intended that the provision of sections of footway, reflective bollards, conspicuous PROW signage and timber bus shelters will reinforce the message to motorists that pedestrians and other non-motorised road users may be present on Spatham Lane. It is acknowledged that these measures are not typical traffic calming features and installation costs may be difficult to justify on this basis alone. However, they will also support active travel on Spatham Lane, in line with government aims to make walking and cycling the preferred travel choice in England (promoted by Active Travel England); furthermore, the more intrusive measures such as vertical and horizontal deflections used on lower speed roads are not recommended on 40mph roads.
 - New white lining (refer to notes above for drawing 1808025-116)

- ▶ 1808025-118: Spatham Lane
 - New 40mph repeater signs mounted on white fencing. Alongside the repeater signage and roundels referred to under 1808025-117, it is suggested that at every third repeater signage interval, the repeater signs could be placed on white fencing with 'Spatham Lane' signage to serve as an intermediate gateway feature reinforcing the sense of 'place' on Spatham Lane.
 - New white lining (refer to notes above for drawing 1808025-116).
 - New conspicuous signage indicating the Public Rights of Way (refer to notes above for drawing 1808025-116).
- ▶ 1808025-119: Spatham Lane
 - New sections of footway to accommodate new rural timber bus shelters at Mid Sussex Golf Club (refer to notes above for drawing 1808025-117).
 - New 40mph repeater signs and roundel markings (refer to notes above for drawings 1808025-116 and 1808025-117).
- ▶ 1808025-120: Spatham Lane
 - New 40mph repeater signs and roundel markings (refer to notes above for drawings 1808025-116).
 - New white lining (refer to notes above for drawing 1808025-116).
- ▶ 1808025-121: Spatham Lane
 - New white lining (refer to notes above for drawing 1808025-116).
 - New 'Spatham Lane' gateway feature at the 40mph speed limit change, including signage, white fencing, roundel marking and coloured surfacing. It is intended that the gateway will emphasise the change in speed limit.

Underhill Lane

2.9 The suggested measures for Underhill Lane are set out on drawings 1808025-122 and 1808025-123 and consist of the following:

- ▶ 1808025-122: Underhill Lane
 - New 30mph gateway feature at Underhill Lane with carriageway rumble strip feature (granite setts), conspicuous 'no motor vehicles' signage and white fencing; including. It is intended that the gateway will emphasise the change in speed limit and discourage through traffic.
 - New 30mph repeater signs and roundel markings. It is recommended that 30mph repeater signage is placed within 200 metres of the terminal signs at the gateway, and then at intervals of 250 metres to ensure that drivers are fully aware of the speed limit in force.
- ▶ 1808025-123: Underhill Lane
 - New 30mph gateway feature, 30mph repeater signs and roundel markings (refer to notes above for drawing 1808025-122).

Beacon Road

2.10 The suggested measures for Beacon Road are set out on drawings 1808025-124 and 1808025-125 and consist of the following:

▶ 1808025-124: Beacon Road

- New dropped kerb pedestrian crossing point with new section of footway on the northern side of the junction at Neville Cottages. It is intended that this will accommodate pedestrian movements from the residential dwellings at Long Park Corner and Neville Cottage on the western side of Beacon Road to the existing footway located on the eastern side.
- Widening of a section of the existing footway to 2 metres combined with trimming of roadside vegetation in other areas to remove hedge encroachment into the existing footway. This section of Beacon Road has no footway on the western side and the existing footway on the eastern side is below the recommended 2 metre width. As a key pedestrian route between residential properties on Beacon Road and the centre of Ditchling to the north, any widening achieved on this footway, combined with the crossing point referred to above will provide an improvement for pedestrians.
- New round top speed humps to reinforce the existing 30mph speed limit.
- Provision of new posts to accommodate a MVAS/SID.

▶ 1808025-125: Beacon Road

- New round top speed humps to reinforce the existing 30mph speed limit.
- Provision of new posts to accommodate a MVAS/SID.
- New village gateway feature at the 30mph speed limit change, including signage, white fencing, roundel marking, coloured surfacing, kerbed width reduction to 5.5 metres, lining and 'dragon's teeth' markings on the approach. It is intended that the gateway will emphasise the change in character from that of rural road to village environment.

Streat Lane

2.11 The suggested measures for Streat Lane are set out on drawings 1808025-126 and consist of the following:

▶ 1808025-126: Streat Lane

- New 30mph speed limit on Streat Lane. It was not confirmed at phase 1 whether Streat Parish Council would wish to pursue a new 30mph speed limit on Street Lane; however, it was noted that residents had raised concerns about traffic speeds. Drawing 1808025-126 has been prepared to serve as a basis for further discussion on this matter.

3.0 Estimate of Likely Construction Costs

3.1 An estimate of likely costs associated with the construction of the traffic calming and highway improvement measures is provided in the tables below. They have been separated out by area, with drawing number references provided.

- 3.2 Given that detailed designs have not yet been completed, it has not been possible to prepare a bill of quantities for each of the measures, on which formal cost estimates (such as those prepared by a Quantity Surveyor) would normally be based. Therefore, the cost estimates provided below are based on Motion's experience as highway design engineers in the delivery of other highway schemes with similar scopes of works. For this reason, these cost estimates should be considered as preliminary figures for comparison purposes. It is recommended that the costings are reviewed and updated at the detailed design stage to ensure that the proposed measures remain feasible both a technically and financially, and that any budgetary requirements that have been established remain appropriate. On completion of the detailed designs, it will be possible for a Quantity Surveyor to be instructed to provide more accurate cost estimates that are based on bills of quantities.
- 3.3 The eventual construction costs will be influenced by (i) design factors such as the choice of materials, the requirements the Local Highway Authority (such the extent of any carriageway resurfacing) and matters raised by a Road Safety Audit (such as signage details or improved street lighting); (ii) pre-existing site conditions such as poor ground conditions, Statutory Undertakers' apparatus or drainage systems; and (iii) commercial factors such as fluctuations in the cost and availability of materials, plant and labour; and whether the works are tendered on the open market or carried out by a local authority framework contractor.
- 3.4 It should also be noted that these costs do not include non-construction costs such as design fees, survey fees, Local Authority costs (approvals, licences, commuted sums), Statutory Undertakers' mitigation works, or legal costs for implementing any Highway Agreements or Traffic Regulation Orders that may be required.

Estimate of Likely Construction Costs

B2112 Clayton Road	Drawing reference	Estimate of likely cost
Gateway feature	1808025-101	£11,000
New footway and crossing point	1808025-101	£6,500
Narrowing with roundel / coloured surfacing	1808025-102	£7,500
Junction kerb re-alignment and crossing point	1808025-103	£20,000

B2112 / B2116 Ditchling centre	Drawing reference	Estimate of likely cost
20mph zone signs and roundel (South Street)	1808025-103	£1,500
20mph zone signs and roundel (West Street)	1808025-103	£1,500
4no new crossing points (incl. narrowings and raised table)	1808025-103	£50,000
New speed cushions (2 pairs - South St & Lewes Rd)	1808025-103	£12,500

B2112 North St & High St	Drawing reference	Estimate of likely cost
New speed cushions (1 pair)	1808025-104	£6,500
Kerb re-alignment & parking bay removed (west)	1808025-104	£8,500
Kerb re-alignment & parking bay removed (east)	1808025-104	£8,000
Kerb re-alignment, priority build-out & 20mph zone signage / roundel	1808025-104	£24,000
Raised table incl. crossing point	1808025-104	£37,500

B2112 North End	Drawing reference	Estimate of likely cost
New footway / bus stop improvement & crossing point	1808025-105	£6,500
Existing priority build-out, cycle lane improvement	1808025-106	£4,000
Existing priority build-out, cycle lane improvement	1808025-106	£5,000
New raised table junction at Bumbrells Crt Rd	1808025-107	£50,000
Gateway feature (northern end of village)	1808025-108	£6,000

Spatham Lane	Drawing reference	Estimate of likely cost
Gateway (southern)	1808025-116	£9,000
New footway (southern end) and crossing point	1808025-116	£20,000
New section of footway / PROW signage	1808025-117	£3,000
New footways and bus shelters	1808025-117	£30,000
PROW signage	1808025-118	£300
New footways and bus shelters	1808025-119	£30,000
White lining at 4.8m width	1808025-116	£5,000
40mph repeater signage, fencing and roundels	1808025-117	£36,000
Gateway (northern)	1808025-121	£8,000

Underhill Lane	Drawing reference	Estimate of likely cost
Western gateway	1808025-122	£11,000
30mph repeater signage	1808025-122	£3,500
Eastern gateway	1808025-123	£9,000

B2112 Common Lane	Drawing reference	Estimate of likely cost
Reflective marker posts	1808025-115	£4,500

B2116 Lewes Road	Drawing reference	Estimate of likely cost
New dropped kerb crossing point	1808025-110	£2,000
Pedestrian improvements at The Fieldway	1808025-110	£9,000
Footway widening to 2m	1808025-110	£15,000
Footway widening to 2m	1808025-111	£25,000
Footway widening to 2m	1808025-112	£11,500
Footway widening to 2m	1808025-113	£35,000
Footway widening to 2m	1808025-114	£5,000
Reconstruct humps	1808025-110	£14,000
Reconstruct humps	1808025-111	£17,500
Reconstruct build-out	1808025-111	£4,000
Road widening, new crossing point with refuge and footways (includes 4 lighting columns)	1808025-112	£140,000
Gateway feature	1808025-114	£10,500

B2116 Keymer Road	Drawing reference	Estimate of likely cost
Gateway feature	1808025-109	£8,000
New footway and crossing point	1808025-109	£20,000

Beacon Road	Drawing reference	Estimate of likely cost
Gateway feature (southern end of Beacon Road)	1808025-125	£11,000
Roundel / coloured surfacing	1808025-102	£4,000
New round top speed humps (4no)	1808025-124	£20,000
Footway widened to 2m	1808025-124	£7,000
New section of footway with crossing point	1808025-124	£10,500

Streat Lane	Drawing reference	Estimate of likely cost
30mph terminal and repeater signage	1808025-126	£11,000

Movable Vehicle Activated Sign / Speed Indicator Device (MVAS/SID)	Drawing reference	Estimate of likely cost
10no new posts (2no Beacon Rd, 2no B2112 nr Dumbrells Ct, 2no B2112 nr Smiths Yd, 1no Clayton Rd, 1no Keymer Rd, 2no Lewes Rd)	Various	£2,500
MVAS/SID device (cost dependant on type selected - suggest budget £2k to £5k per unit)	Various	£5,000

Street Lighting

- 3.5 It has been assumed that the Road widening and new refuge island on Lewes Road will require new lighting columns to be installed as part of the works, and this has been considered as part of the estimate of costs for this item. However, it may subsequently be determined that other measures will also require new or improved street lighting, for instance regulations require that street lighting is provided in locations where road humps are installed. Beacon Road is already lit but it may be determined that the lighting does not meet the required standards. Similarly, it may be determined through consultation with the Highway Authority or through the Road Safety Audit process that the suggested pedestrian crossing points require new or improved street lighting. The costs of providing lighting at these locations will be dependent on the quantity and specification of lighting that is to be provided; however, an indication of the potential lighting costs is provided below.

Potential street lighting costs (if required)	Drawing reference	Estimate of likely cost
Beacon Road speed humps	1808025-124	£45,000
New 4no crossing points at village centre	1808025-103	£24,000
New 4no crossing point at Lewes Road narrowing, Keymer Road (near The Drove), Spatham Lane junction and Clayton Road PROW	Various	£9,000 each location

Statutory Undertakers Apparatus

- 3.6 As mentioned above, the cost estimates do not include costs associated with the protection or relocation of Statutory Undertakers' apparatus. This may include above ground items such as telegraph poles, telecoms cabinets, electricity substations which need to be relocated; or below ground services such as gas, water, electricity, telecoms cables and drainage that may be affected by construction works.
- 3.7 Typically, buried services are affected where works require existing levels to be lowered, or where new carriageway is being constructed over existing buried services. It is anticipated that the majority of the proposed measures will have minimal impact on any existing Statutory Undertakers' apparatus; however, the road widening on Lewes Road may affect any buried service in the roadside verges. In any event it will be necessary as part of the detailed design stage to assess the impact any works will have on existing infrastructure.

Traffic Regulation Orders

- 3.8 Traffic Regulation Orders (TROs) will be required to accompany proposed changes to (i) waiting restrictions (i.e. yellow lines and parking bays), (ii) new road humps, and (iii) speed limit changes. TROs can only be made by Highway Authorities following a statutory consultation process; in the event that objections are received during the consultation, it may be necessary to alter the proposals to achieve a positive outcome. Valid objections that cannot be overcome may result in the proposal being abandoned.

Road Safety Audits

- 3.9 Local Highway Authorities will normally require that any highway alteration scheme that is likely to have an impact on road user behaviour undergoes a Road Safety Audit (RSA) process, which carried out by an audit team that is independent from the design team.
- 3.10 This process consists of a stage one RSA carried out on the preliminary drawings, a stage two RSA carried out on the detailed design drawings and a stage three RSA carried out on completed works. At each stage, an audit report is produced highlighting any potential road safety problems and the scheme designer must provide a response report which addresses each problem raised. This is reviewed by the Highway Authority to determine whether further design changes are required. A stage four post-opening RSA may also be requested by the Highway Authority, which consists of a review of collision data during the first 12 months after scheme completion; however, this is not normally required on smaller schemes unless there are concerns that the scheme has had an unintended detrimental impact on road safety.

4.0 Phasing and Packaging of Measures

4.1 It is considered that the majority of the measures suggested in this study could be implemented as standalone packages of works, implemented as funds become available. However, some cannot be implemented in isolation and should be considered as a package of measures, as set out below.

- ▶ The extended 20mph zone in Ditchling village centre will need to be reinforced with traffic calming measures; therefore, the suggested humps, raised tables and carriageway narrowings should be considered as part of a package of measures. The design of these traffic calming measures can be varied following consultations; however, their omission would undermine the implementation of the 20mph zone extension. It is also recommended that the changes to the on-street parking arrangements should be considered as part of this package; although it would still be feasible to implement the 20mph zone should the parking TROs be unsuccessful.
- ▶ Whilst the footway improvements and new crossing points on Lewes Road could be provided in discrete packages; it is considered that implementing these improvements in one package will provide a cohesive set of improvements for pedestrian movements on this route. Similarly, it is considered that the footway improvements and crossing points on Beacon Road should form a cohesive package of pedestrian improvements.
- ▶ The Spatham Lane 40mph speed limit should be implemented as a package with the repeater signs and roundels. Other measures suggested for Spatham Lane may be treated as optional measure to support the new speed limit.
- ▶ The Underhill Lane 30mph speed limit should be implemented as a package with the repeater signs, whereas the rumble strip and improved 'no motor vehicle' gateway signage may be treated as optional measure to support the new speed limit and discourage through traffic.

5.0 Recommendations

- 5.1 It is intended that the package of drawings and estimate of likely construction costs outlined above will provide the Beacon Parishes Traffic Group with sufficient material to form the basis of further consultations with (i) the Local Highway Authority (ESCC), (ii) fellow Parish officers, (iii) local residents, and (iv) other stakeholders (i.e. emergency services, local businesses).
- 5.2 Given that ESCC has not been able to provide input during the phase 2 work, it is recommended that the next stage should be to consult ESCC Highways Team, with the aim of seeking its support for these proposals, with amendments being made as necessary. These amendments would also reflect any initial comments from the BPTG. It is likely that ESCC will request that the proposals undergo a stage one Road Safety Audit as part of the review process.
- 5.3 As noted above, the Ordnance Survey (OS) mapping for the centre of Ditchling does not appear to match on-site observations, therefore it is recommended that a topographical survey is carried out in this area to confirm the feasibility of the proposed measures.
- 5.4 Once it is confirmed that ESCC and the BPTG support the proposals, it is anticipated that a wider consultation will be carried out with local residents and stakeholders, which may result in further amendments to the suggested measures. It may be necessary to re-consult the Road Safety Audit team on any scheme changes.
- 5.5 As part of the implementation process it will be necessary for the BPTG to identify sources of funding which may be achieved through (i) Parish funds, (ii) local initiative or fund matching through local authorities or (iii) obligations placed on local developers through the planning process. The method of funding achieved is likely to influence the procurement method and whether the detailed design and implementation of the measures will be coordinated by the BPTG, ESCC, or the private sector through developer funding.

6.0 Summary

- 6.1 Motion has been instructed by the Beacon Parishes Traffic Group (BPTG) to conduct a traffic study within the Beacon Parishes area, to enable the BPTG to develop proposals to address local traffic issues.
- 6.2 The first phase was completed in October 2022 which outlined a series of potential traffic calming and highway improvement measures.
- 6.3 This report forms part of the phase two work, which develops the preferred traffic calming and highway improvement options into a set of highway layout drawings with accompanying notes and cost estimates for each option.
- 6.4 The drawings produced for phase two are intended to serve as preliminary drawings for the purpose of establishing the feasibility of the proposals, and for gaining the support of the Highway Authority and other stakeholders before progressing to the implementation stage.
- 6.5 At the implementation stage it will be necessary to prepare a detailed design which will include construction details, material specifications, setting out information / dimensional data and any relevant specifications needed for construction. The detailed design stage will involve obtaining topographical survey data, statutory undertakers record and may involve drainage/lighting surveys.
- 6.6 The Ordnance Survey (OS) mapping for the centre of Ditchling appears to be inaccurate and it is recommended that a topographical survey is carried out in this area to confirm the feasibility of the proposed measures.
- 6.7 An overview of the study area is shown on drawing 1808025-100, with details shown on drawings 1808025-101 through to drawing 1808025-126. This document provides an overview of the various measures shown on each of these drawings. Reference should be made to each drawing for further details of these proposals.
- 6.8 It is considered that the majority of the measures suggested in this study could be implemented as standalone packages of works. However, some cannot be implemented in isolation and should be considered as a combined package of measures, as summarised below:
 - ▶ The extended 20mph zone in Ditchling village centre will need to be reinforced with traffic calming measures; therefore, the suggested humps, raised tables and carriageway narrowings should be considered as part of a package of measures. It is also recommended that the changes to the on-street parking arrangements should be considered as part of this package.
 - ▶ It is recommended that the footway improvements and new crossing points on Lewes are implemented as one package providing a cohesive set of pedestrian improvements.
 - ▶ It is recommended that the footway improvements and new crossing points on Beacon Road are implemented as one package providing a cohesive set of pedestrian improvements.
 - ▶ The Spatham Lane 40mph speed limit should be implemented as a package with the repeater signs and roundels.
 - ▶ The Underhill Lane 30mph speed limit should be implemented as a package with the repeater signs.
- 6.9 It is recommended that ESCC Highways Team is consulted with the aim of seeking its support for these proposals. It is anticipated that a wider consultation will then be carried out with local residents and stakeholders, which may result in further amendments to the suggested measures.
- 6.10 ESCC is likely to request that a stage one Road Safety Audit is carried out on the preliminary proposals, followed by stage two and three audits at the detailed design and construction stages.
- 6.11 It will be necessary for the BPTG to identify sources of funding, which will influence the procurement method for these works.