

# Polegate High Street Improvements

## BSIP Mobility Hubs – Review Report

*Prepared for*

**East Sussex County Council**

January 2022



**A partnership between:**

**COSTAIN CH2M** ● ● ●  
Supporting East Sussex



Ringer Offices  
The Broyle  
Ringmer  
East Sussex  
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# Contents

Section	Page
<b>Document Issue</b> .....	<b>v</b>
<b>Acronyms and Abbreviations</b> .....	<b>vi</b>
Executive Summary.....	vii
<b>1. Introduction</b> .....	<b>9</b>
<b>2. Bus Stop Improvement - Preliminary Design</b> .....	<b>10</b>
<b>3. Mobility Hub Review</b> .....	<b>11</b>
<b>4. Conclusions</b> .....	<b>18</b>
<b>Appendix A</b> .....	<b>19</b>
Drawing .....	19



# Document Issue

## Revision History

Issue	Author	Date	Description
1	Ian Tingley	27/01/22	Revision P01

## Technical Check

Role	Name	Signature	Date
Senior Design Engineer	C Kwok	C Kwok	27/01/22

## Approval

Role	Name	Signature	Date
Design Team Manager	D Johns	<i>D Johns</i>	31/01/22

# Acronyms and Abbreviations

ESCC	East Sussex County Council
ESH	East Sussex Highways

# Executive Summary

In accordance with the Government's National Bus Strategy for England "Bus Back Better" ESCC have a mission to ensure that East Sussex residents and visitors enjoy the highest possible quality bus services that provide a frequent and comprehensive choice, reduce congestion and make a positive contribution to better air quality and decarbonisation.

The proposals are detailed in a separate report – East Sussex Bus Service Improvement Plan (BSIP) – that was presented and approved at ESCC's Lead Member meeting on 25 October 2021.

The report provided detailed analysis of measures to improve bus services around the County, including the provision of mobility hubs at various locations including Polegate High Street. It is suggested in the report that mobility hubs are introduced along the high street at the northbound bus stop and at the railway station.

Separate to this report ESH are developing the design of measures to reduce the speed limit along High Street to 20mph. Because of the overlap in work ESH have been asked to investigate the provision of the mobility hubs as part of the design of the 20mph scheme.

The recommended layout of a mobility hub has been developed to ensure smooth, uninterrupted, interchange connections between different transport services and 2 layouts are detailed in the BSIP.

ESH have reviewed these layouts and assessed these against the available site conditions along high Street. The conclusion is that there is insufficient space available to introduce features of this nature without the acquisition of a significant area of private land and / or the removal of existing property. It is therefore concluded that it is currently not possible to provide a fully compliant mobility hub at either the northbound bus stop or at the railway station.

It is noted that some form of mobility provision is already made close to the southbound bus stop that allows passengers to switch between buses, taxi, rail and cycle, although these facilities are provided as a part of the railway station and on land owned by Network Rail. Although the layout does not accord with the BSIP design layout, however, they do provide some form of mobility interface.

Limited improvements are achievable at the northbound bus stop to facilitate easier pedestrian access to buses by the introduction of high access kerbing and this is also achievable at the southbound bus stop.

It is also proposed to install electronic display signs at each location to supplement the existing real time information signing already in place.

No additional improvements are considered viable.



# 1. Introduction

- 1.1. East Sussex Highways has worked in partnership with East Sussex County Council to promote a scheme to introduce a 20mph speed limit along the whole of High Street, Polegate.
- 1.2. The proposed speed reduction extends between the B2247 Station Road at the northern end of High Street and the A2270, Eastbourne Road, at the southern end.
- 1.3. The proposed measures also include improvements to the bus stops adjacent to the Railway Station and the Downlands Medical Centre by re-aligning the entry kerbing to make it easier for buses to access the stops and providing high access kerbing to enable pedestrians to alight buses more easily.
- 1.4. Separate to this, ESCC are developing proposals to introduce mobility hubs at various locations around the County to help promote public transport and increase patronage. The mobility hubs are being promoted through ESCC's Bus Service Improvement Plan (BSIP) which aims to deliver improved facilities to encourage greater use of public transport.
- 1.5. In the BSIP the northbound bus stop on High Street is listed as one of the potential sites forming a part of the suggested network of mobility hubs around the County as is the railway station.
- 1.6. To minimise any overlap between these two projects ESCC have requested that ESH investigate whether there is scope to provide mobility hubs at these locations and, if so, to include these in the 20mph scheme.
- 1.7. This brief report is prepared to record the outcome of the assessments made on the existing site conditions and to record and comment on what is achievable in terms of mobility hub along High Street.

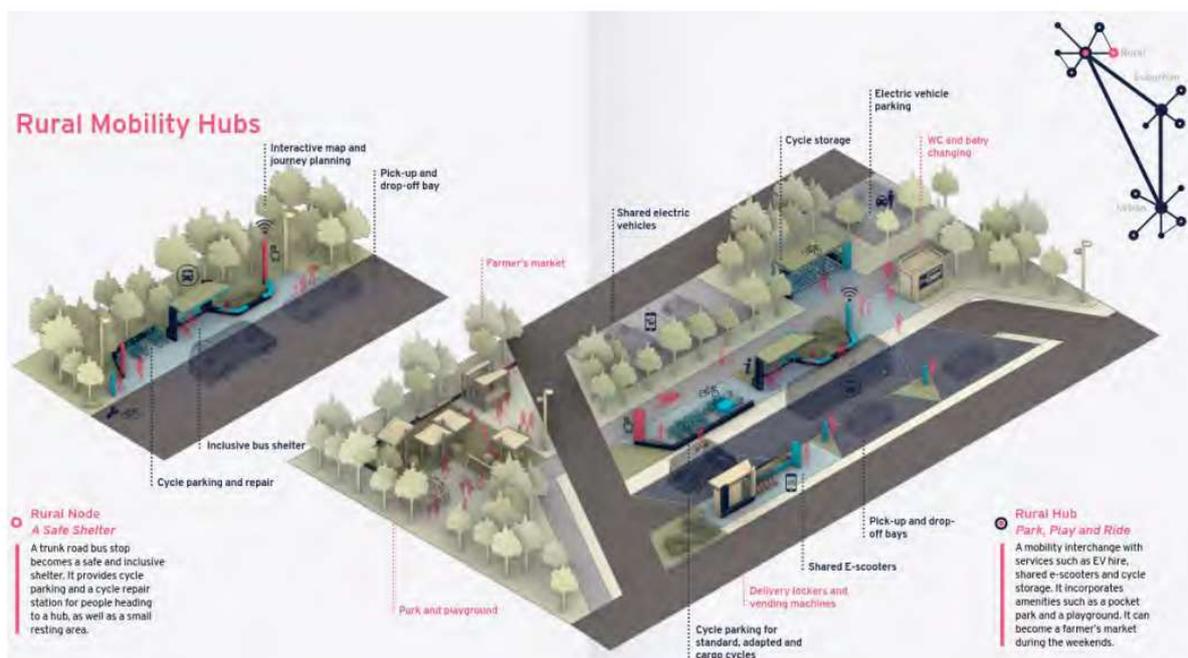
## 2. Bus Stop Improvement - Preliminary Design

- 2.1. The preliminary design of the proposed 20mph scheme was initially undertaken by Jacobs London office and included improvements to the two bus stops along High Street.
- 2.2. The design included the realignment of the kerbing at both bus stop locations to widen the footways resulting in the width of the laybys being reduced. The idea was that buses waiting at these stops would encroach into the live carriageway lane.
- 2.3. A Stage 1 Road Safety Audit was carried out on the proposals in April 2019.
- 2.4. The audit team raised concern with the layout of the northbound stop on the grounds that drivers wishing to access the parking bays immediately north of the bus stop could strike the realigned kerbing resulting in loss of control type crashes. The decision was subsequently taken to retain the existing kerblines but modify this to provide a higher kerb upstand to aid passengers alighting buses.
- 2.5. An informal consultation was held in November 2020, from which Network Rail raised concern with the layout at the southbound bus stop, as waiting buses would obscure sightlines between drivers and the wig-way signals. The concern was that drivers may not observe the barriers being in the lowered position, with potential for collision with the barriers. After some additional design investigation, the decision was subsequently taken to retain the existing layout but modify this to provide higher a kerb upstand to aid passengers alighting buses.
- 2.6. It is not proposed to replace the existing shelters at each stop.
- 2.7. It is not proposed to remove the existing realtime information signs from each location but supplement these with additional, interactive, information signage.
- 2.8. The existing CCTV cameras at both sites will be retained unaltered.

## 3. Mobility Hub Review

### General

- 3.1. Following completion of the initial road safety audit on the proposed 20mph scheme ESCC instructed ESH to review potential options to include mobility hubs along the High Street in accordance with ESCC's Bus Service Improvement plan (BSIP) that received Lead Member approval in October 2021.
- 3.2. ESH have reviewed the requirements for a mobility hub and looked to see what measures, if any, are achievable along the High Street. The proposal is to include any potential measures as a part of the 20mph scheme.
- 3.3. Guidance provided in the BSIP suggests that a mobility hub should be a recognisable place that offers different and connected transport modes, including rail, bus / coach, taxi and bicycle. The hubs should include enhanced facilities and information features that both attract and benefit the traveller.
- 3.4. The following image, taken from Figure 5-1 in the BSIP, shows 2 typical layouts for a mobility hub:-



- 3.5. A typical hub might:-

- include hi-tech equipment such as interactive screens;
- have a priority of safety and security with CCTV and good lighting;

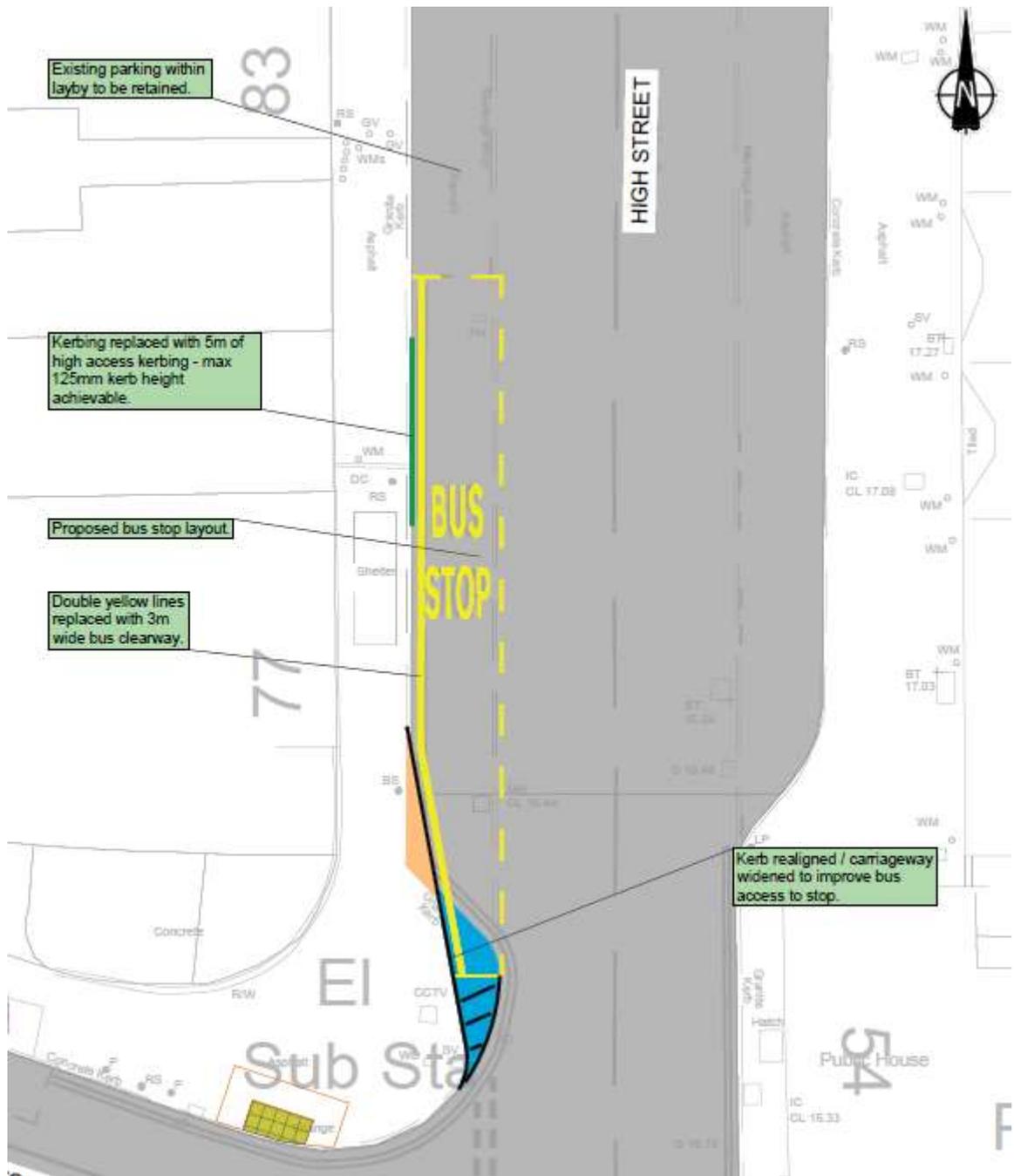
- make use of solar panels to provide renewable energy source;
  - be fully accessible and multi-modal;
  - include landscaping.
- 3.6. ESH have undertaken a review of the requirements for a mobility hub and compared this with the existing site conditions along High Street. The first observation was that Polegate High Street is heavily developed with shops and business units along both side of the road between the railway station and Station Road to the north. As such there is very limited opportunity to provide a mobility hub to the scale indicated in the images.
- 3.7. The High Street is crossed approximately ½-way along its' length by the Eastbourne to London railway line immediately east of which lies the Polegate Station. This is one of the key stations along this line and incorporates a car park, taxi rank, drop-off location and cycle racks close to the station entrance. All of this is provided on private land understood to be owned by Network Rail.

#### **Northbound Bus Stop – Medical Centre**

- 3.8. This bus stop is located in a layby immediately outside of the Medical Centre. The bus stop is positioned at the southern end of the layby with the northern end providing space for parked vehicles.
- 3.9. As a part of the original design of the 20mph scheme it was proposed to reduce the width of this layby so that waiting buses would be half in the layby, half in the running lane. This layout would have increased the width of the footway at the back of the layby, significantly improving the area for pedestrians.
- 3.10. The layout was submitted for Stage 1 Safety Audit as a part of the overall scheme from which it was established that the audit team had a number of concerns with it. The decision was subsequently taken not to develop this layout further but, instead, retain the existing layout. Small-scale improvements are proposed to the entry taper to the layby to make access easier for buses and high access kerbing will be provided to make it easier for passengers to access the buses.
- 3.11. The following image shows the existing bus stop:-



- 3.12. Due to the constrained nature of the site there is no scope to introduce the major improvements required to create a mobility hub at this location.
- 3.13. The following image shows the measures that are proposed at this location:-



3.14. The existing site has a realtime information sign in place and it is proposed to supplement this with an additional, interactive, display sign that accords with those suggested for a mobility hub.

**Southbound bus stop – Railway Station.**

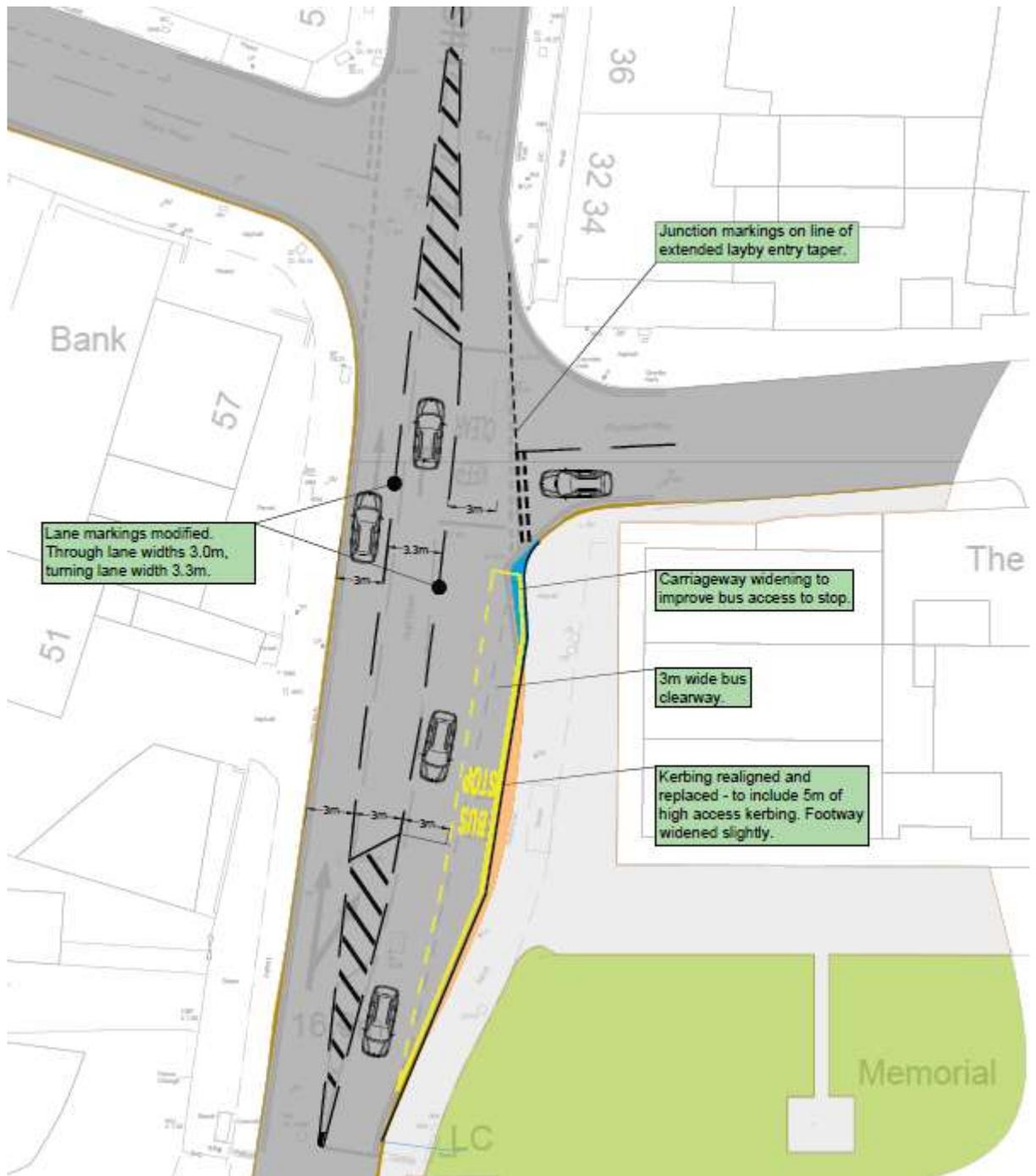
3.15. The southbound bus stop is located immediately adjacent to the Polegate railway station, with easy pedestrian linkage between the stop and the station entrance.

3.16. The footway behind the bus stop measures approximately 2m in width with a sizeable area of private forecourt behind.

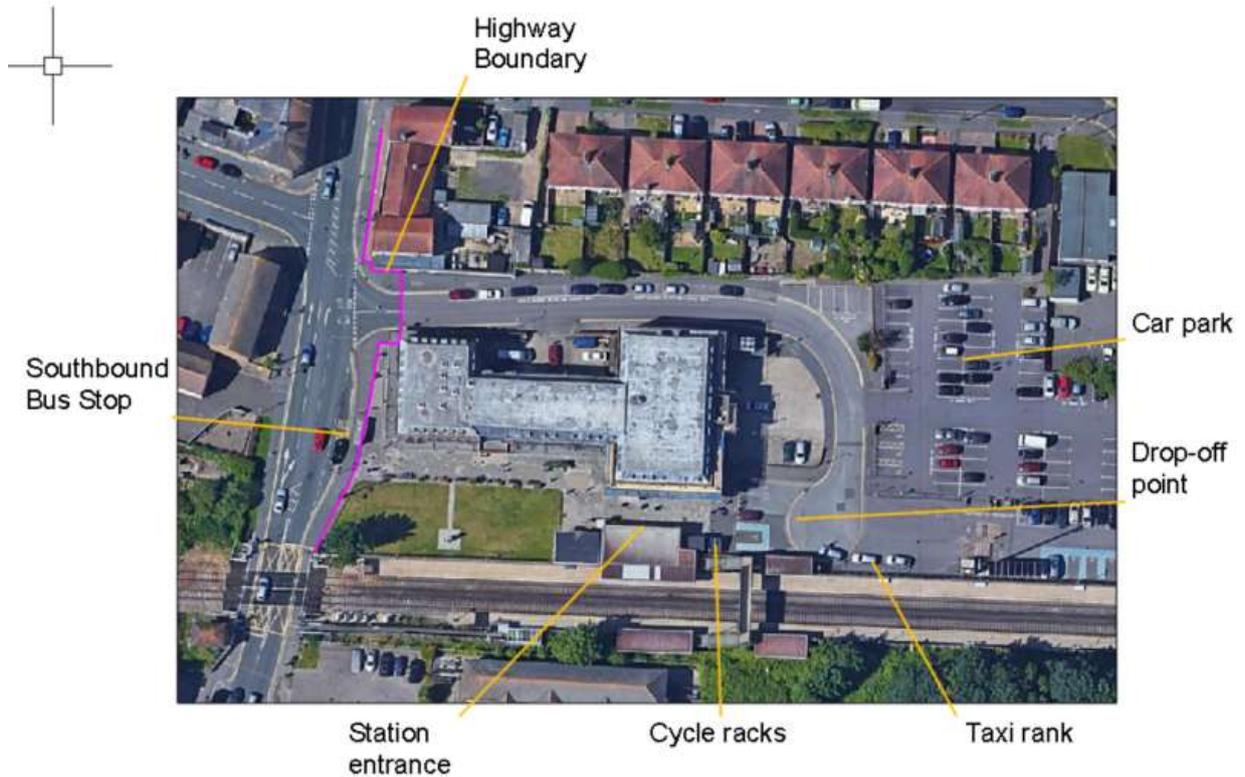
3.17. The following image shows the layout of the existing bus stop:-



- 3.18. In the above image the grass area and shop forecourts are privately owned, understood to be by Network Rail but this has yet to be confirmed. It can be seen that there is insufficient space within the Public Highway to provide the type of layout required for a mobility hub here.
- 3.19. The original design for this bus stop suggested that the kerbing be adjusted so that waiting buses would be half in the layby, half in the running lane. This layout would have increased the width of the footway at the back of the layby, significantly improving the area for pedestrians.
- 3.20. Initial consultation was undertaken with Network Rail on this layout from which it was established that Network Rail could not support the proposal as buses would block the sightline to the nearside wig-wag signals.
- 3.21. The proposed layout was therefore modified. The proposed layout now involves minor realignment of the kerbing to provide easier access for buses to the stop and high access kerbing to make it easier for pedestrians to get on / off a bus. The following image shows the proposed layout at this location:-



- 3.22. The existing bus stop site has a realtime information sign in place and it is proposed to supplement this with an additional interactive display sign that accords with those suggested for a mobility hub.
- 3.23. The lack of available space at this location precludes the provision of a mobility hub within the Highway Boundary but it has been noted that the various elements of a hub are already provided in close proximity to this bus stop as detailed in the following image:-



- 3.24. All of the facilities except the southbound bus stop highlighted above lie on land under the ownership of Network Rail. There is scope to redevelop the whole area to provide a formal, compliant, mobility hub but this is likely to require lengthy negotiation with the land owners. This is likely to result in the timescales for delivery of the 20mph scheme not being realised.
- 3.25. It is recommended that if there is commitment to introduce a mobility hub in this area, this is progressed as a separate scheme to the High Street works.

## 4. Conclusions

- 4.1. It has been established that at both of the bus stop locations along High Street the existing site conditions prevent the provision of a formal mobility hub due to the lack of physical space available.
- 4.2. Site conditions at the northbound stop outside the medical centre mean that it is not possible to introduce anything other than small-scale improvements including high access kerbing to assist passengers with getting on / off a bus. Small modifications can also be made to the entry kerbing to make it easier for buses to access the stop and an additional display panel can be installed to provide passengers with additional information.
- 4.3. Conditions at the southbound bus stop are similar to the northbound stop in that there is insufficient space in which to provide a formal mobility hub at the bus stop.
- 4.4. Within close proximity to this bus stop, however, the various elements forming a hub are already in place, including station access, taxi rank, parking, cycle rack and drop-off point, within a very short walk of the southbound bus stop.
- 4.5. At the southbound bus stop it is not possible to introduce anything other than small-scale improvements in the form of high access kerbing to assist passengers with getting on / off a bus. Small modifications can also be made to the entry kerbing to make it easier for buses to access the stop and an additional display panel can be installed to inform passengers.
- 4.6. There is scope to re-model the whole area to provide a formal mobility hub but this would require significant negotiation with land owners.
- 4.7. If there is commitment to introduce a formal mobility hub in this location it is recommended that this is progressed as a separate scheme to the High Street works as the timescales for progressing the design and land negotiations for a hub are likely to delay the introduction of the 20mph scheme considerably.

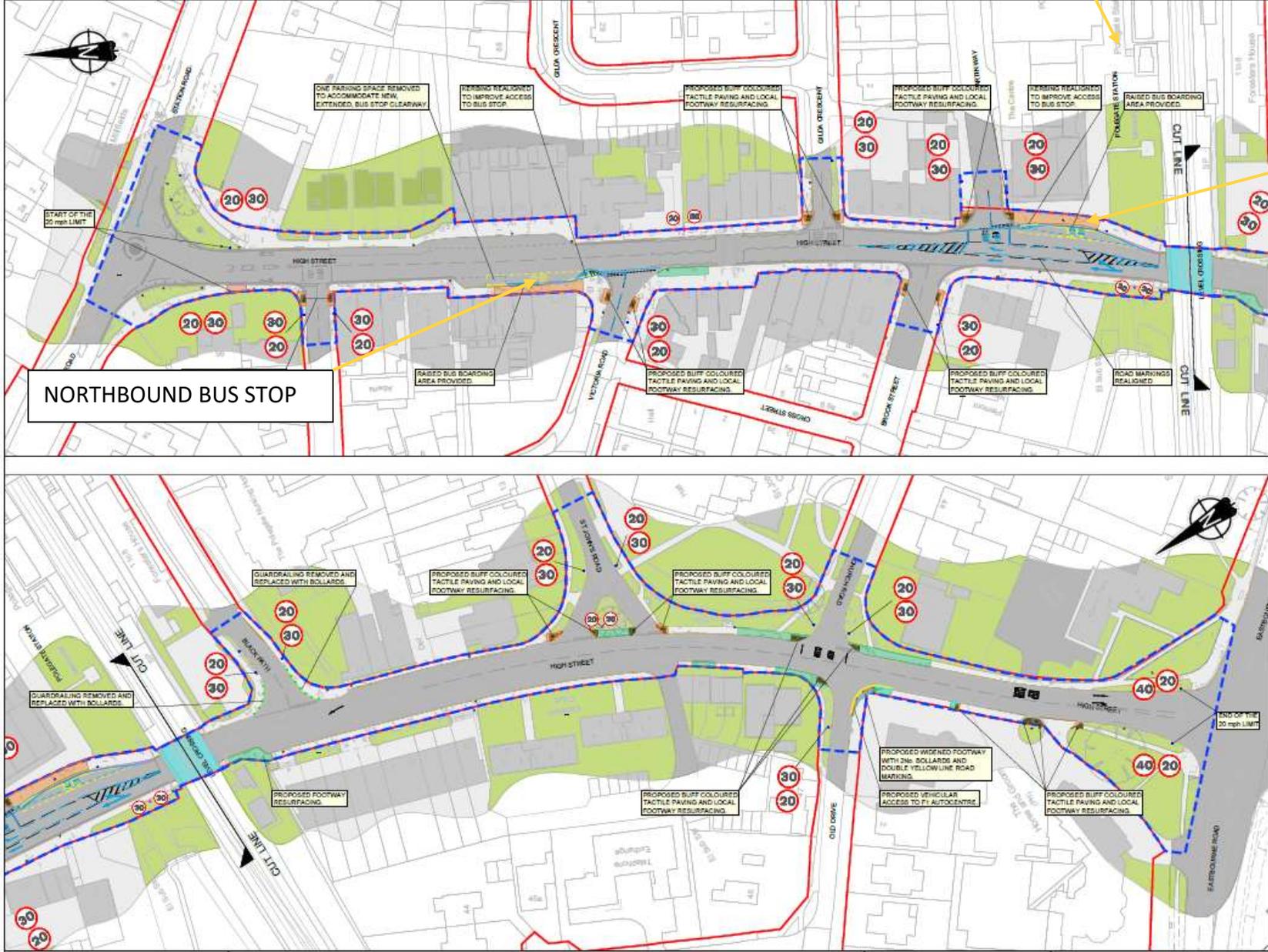
# Appendix A

## Bus stop location sketch

STATION ENTRANCE

SOUTHBOUND BUS STOP

NORTHBOUND BUS STOP



- NOTES**
1. Background based on Ordnance Survey mapping supplemented with topographical survey.
  2. DO NOT scale from this drawing.
  3. This drawing shall be printed in colour.
  4. All existing road markings other than those specifically identified on this drawing are to be refreshed.

Rev	Date	Proposed by	Checked by	Approved by
001	01/03/2023	...	...	...
002	01/03/2023	...	...	...

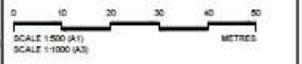
**LEGEND**

Highway Boundary	Proposed yellow road markings	Proposed traffic sign
Scheme Extents	Existing road markings to be removed	Traffic sign to remain
Proposed full height kerb	Proposed cartage way construction	Proposed bollard
Proposed dropped kerb	Proposed buff bilinear tactile paving	New traffic sign - 500mm diameter / 300mm repeater
Proposed transition kerb	Proposed footway construction	
Proposed taxi access kerb	Existing footway re-surfaced	
Proposed white road markings		

**East Sussex Highways**  
A partnership between

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Project: Polegate High Street  
Drawing title: General Arrangement Consultation Plan



Scale	50	Revision	002
Date	1/3/2023	Date	2023/04/13
Drawn by	T.Tingley	Checked by	C.Wood
Approved by	T.Tingley	Project	CH12
Project No	3520000	Original size	A1
Drawing number: Wates 1 - Design: 1 Type 1 Rev 1 Issue: HGH-SCH 122B-OR-21-002			