

# **Ashley Road/ New Zealand Avenue Improvements for pedestrians**

**February 2018**



Project Title: Ashley Road/ New Zealand Avenue.  
Improvements for pedestrians.

Document Title: Feasibility Report

Client Reference: PC0811

Date: February 2018

Prepared By: Jonathan Wilkinson

Authorised By: Peter Shimadry

#### Amendment List

Issue / Rev	Issue / Rev Date	Removed		Inserted	
		Page	Issue / Rev	Page	Issue / Rev

File path: I:\EA\PC all\Resource Pool\.....

## CONTENTS

	<b>Page No.</b>
1. INTRODUCTION	5
2. SITE ANALYSIS AND DATA COLLECTION	6
2.1 Site Analysis	6
2.2 Personal Injury Collision Data	8
3. DISCUSSION AND OPTIONS	
3.1 Do nothing	9
Location 1 - New Zealand Avenue	
3.2. Option 1a      Widen south side of island	10
3.3. Option 1b      Widen north side of island	11
3.4. Option 1c      Single Phase Crossing	12
3.5. Option 1d      Modify existing tactile paving	12
3.6. Other options considered	13
Location 2 - Ashley Road	
3.7. Option 2a      Widen footway in to bus layby	14
3.8. Option 2b      Widen footway south of bus stop	15
3.9. Option 2c      Increase pedestrian capacity of island	16
3.10.Option 2d      Widen island	16
Location 3 - Hersham Road	
3.11.Option 3      Minor improvements	18
4. RECOMMENDATION	19

## FIGURES

- 1 Photo New Zealand Avenue Controlled Crossing
- 2 Location Plan
- 3 Highway extents outside school
- 4 Photo Footway outside school in Ashley Road
- 5 Photo Footway south of bus stop
- 6 Photo Traffic island Ashley Road
- 7 Photo Traffic island Hersham Road

## DRAWINGS

PC0811-03 Ashley Road New Zealand Ave Sheet 1  
PC0811-03 Ashley Road New Zealand Ave Sheet 2



## **1. INTRODUCTION:**

Requests have been made that Surrey County Council look at existing pedestrian facilities in the vicinity of Ashley C of E Primary School which is increasing in pupil numbers. Concerns have been raised over the safety and capacity of the pedestrian facilities, in particular the capacity of the controlled crossing in New Zealand Avenue (Figure 1) and the footway outside the school. A Road Safety Outside Schools assessment has been carried out and was used to inform this study.



Figure 1: New Zealand Avenue Controlled Crossing.

## 2. SITE ANALYSIS AND DATA COLLECTION:

### 2.1 Site Analysis

A Road Safety Outside Schools assessment was carried out on 14<sup>th</sup> June 2017 between the hours of 1440 and 1530. It was found the majority of the pedestrians leaving the school headed north along Ashley Road towards the town centre crossing New Zealand Avenue at the controlled crossing. The extents of the assessment were from the junction of New Zealand Avenue and Ashley Road to the junction of Ashley Road and Hersham Road. A 30 mph speed limit is in place. A bus stop layby is located outside the school, buses stop three times an hour during the day. The school has confirmed that they do not regularly use the layby.

Adjacent to the carriageway opposite the school there are parking bays. The majority of the parking bays are for permit holders, the remainder are restricted public parking bays. Parking directly outside the school is restricted by double yellow lines.

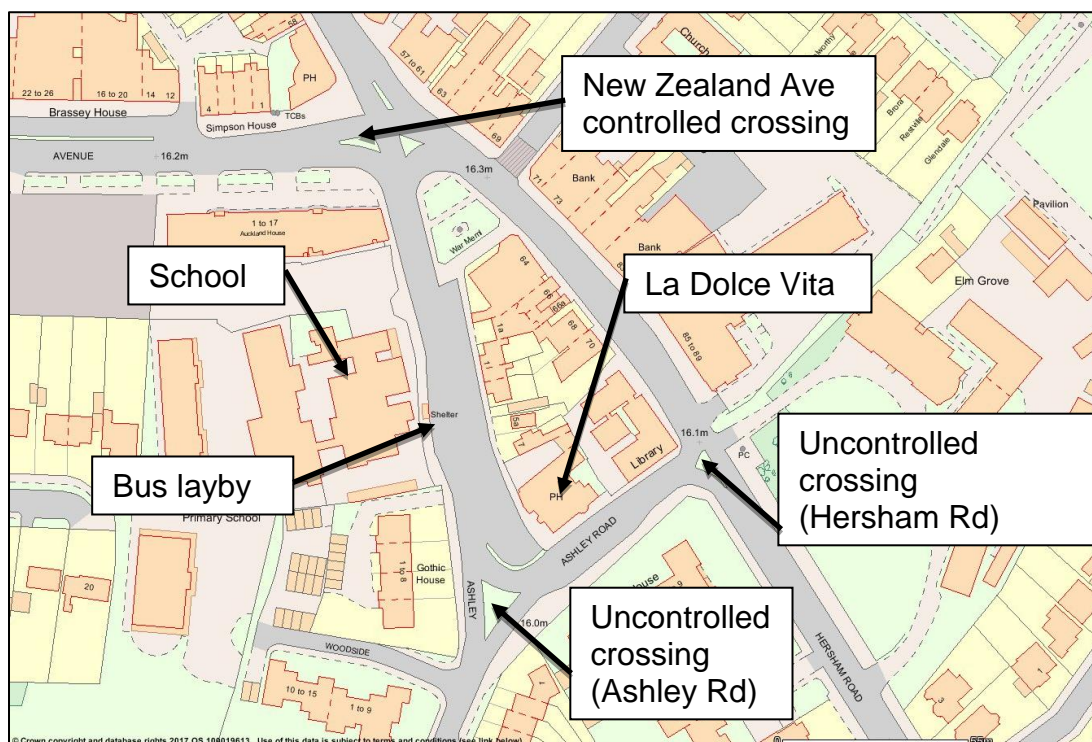


Figure 2: Location plan

The assessment highlighted the concerns with the New Zealand Avenue crossing. The crossing located adjacent to the junction with Ashley Road and High Street allows pedestrians to cross the A244 in two stages. The central island is approximately 29m<sup>2</sup> and has a limited capacity for pedestrians. At school leaving time it was observed that the island was filled to capacity and a number of pedestrians had to wait on the south footway for next green man due to the lack of space.



The assessment also noted increasing footway width near the school entrance in Ashley Road would improve capacity for pedestrians at school drop off and pick up times. The rear of the footway outside the school is privately owned by the school, shown in pink on the plan below (Figure 3). On site the privately owned section is denoted by a concrete edging.



Figure 3: Highway extents outside school (Public highway extents shown in yellow, privately owned footway shown in pink)

Limited pedestrian capacity of the central island at the junction opposite La Dolce Vita restaurant was also highlighted.

Also observed while on site was that the uncontrolled crossing in Hersham Road was used by a number of pupils and parents. It was noted that this island did not have tactile paving.



## 2.2 Personal Injury Collision Data

An assessment has been made of the personal injury collisions for the extents of the Road Safety Outside Schools assessment last 3 full years and part of 2017 where data is available, giving the period between 1<sup>st</sup> January 2014 and 30<sup>th</sup> September 2017. The Police and Surrey County Council do not collect or hold 'damage only' collision data, and therefore we are unable to report or comment on these.

Latest 3 year and year to date collisions (01/01/14 to 30/09/17)			
Year	Slight	Serious	Fatal
2014	3	0	0
2015	1	0	0
2016	2	0	0
2017 (Jan to Sept)	1	0	0
<b>Total</b>	<b>7</b>	<b>0</b>	<b>0</b>

When the police attend personal injury collisions they assess and log the contributory factors that lead to the collision. The table below shows all the factors that led to the collisions that have been recorded at this location during this assessment period. Some collisions have a number of factors attributed to them.

Collision contributory factors (01/01/14 to (30/09/17)	
Factor	Number
No factors given	3
Failed to look properly	2
Failed to signal/misleading signal	2
Careless/reckless/in a hurry	1
Inexperienced or learner driver	1
Road layout (e.g. bend, hill, narrow)	1
Too close to cyclist	1

It should be noted none of the recorded collision injuries involved a pedestrian.

**3. OPTIONS:****Do nothing**

This option looks at carrying out no works. Personal injury data suggests that pedestrians are using the existing facilities safely.

**Conclusion**

It is clear from site observation that some of the existing facilities lack the pedestrian capacity needed at school leaving time. Walking as a sustainable mode of transport is being encouraged, the absence of improvements does not support this initiative.

**Location 1 - New Zealand Avenue Controlled Crossing.****3.2 Option 1a – Widen south side of island (see drawing PC0811-03 Sheet 1)**

This option is to widen the island on the south side. Vehicle tracking of the existing road layout shows that Heavy Goods Vehicles travelling from Ashley Road west in to New Zealand Avenue need the full carriageway width to negotiate the bend. The carriageway would have to be widened into the south footway in order to widen the island and allow HGVs to continue to use the junction. The south footway is all public highway and approximately 7m wide. A number of utility apparatus (predominantly BT) are present in the south footway. Traffic signal apparatus and street furniture are present in the south footway and would have to be relocated.

**Conclusion**

This option is feasible and could increase the area of the island by approximately 20m<sup>2</sup> improving the pedestrian capacity significantly. It is likely that adjustments to utility apparatus would be necessary to widen the carriageway and could be very expensive. Before pursuing this option it is recommended that trial holes are carried out to determine the likely impact on utility apparatus and the estimated cost of adjusting the apparatus. Some existing traffic signal poles would have to be relocated for construction of this option, due to the age of the existing signal equipment it may be necessary to replace all the equipment which could be costly.

Guide cost for utility works - Unknown

Guide cost for trial holes - £5,000

Guide cost for construction (excluding utility works) £59,000 - £140,000

A more precise cost for construction cannot be determined at this stage as it is dependent upon the condition of the existing signal equipment. A refurbishment of the existing signals is expected around 2018/19 and if works were to be coordinated with this it would likely result in a cost reduction.

### **3.3 Option 1b – Widen north side of island (see drawing PC0811-03 Sheet 1)**

The second option is to widen the island on the north side. To do this would require the carriageway on the east bound approach to the traffic lights to be reduced from two lanes to one.

#### **Conclusion**

This option would increase the area of the island by approximately 20m<sup>2</sup> improving the pedestrian capacity significantly. Reducing the carriageway by one lane could have a significant impact on traffic congestion and would require modelling before pursuing. Utility plans indicate this option would have minimal impact on their apparatus. Some existing traffic signal poles would have to be relocated for construction of this option, due to the age of the existing signal equipment it may be necessary to replace all the equipment which could be costly.

Guide price for modelling Options 1b and 1c - £6,000

Guide cost for construction (excluding utility works) £39,000 - £100,000

A more precise cost for construction cannot be determined at this stage as it is dependent upon the condition of the existing signal equipment. A refurbishment of the existing signals is expected around 2018/19 and if works were to be coordinated with this it would likely result in a cost reduction.

### **3.4 Option 1c – Single phase crossing (see drawing PC0811-03 Sheet 1 and J508 Proposed modification)**

Option 1c is to modify the existing controlled crossing allowing pedestrians to cross the whole road in a single phase avoiding the need to congregate on the island. The existing crossing points would be realigned to allow pedestrians to cross the road in a straight line.

#### **Conclusion**

Allowing pedestrians to cross the road in a single phase eliminates the issue of a limited capacity on the island. However it does require traffic travelling east bound on New Zealand Avenue and traffic wanting to travel west bound to be held on a red light at the same time and for longer. The Traffic Signals Team have concerns this could have a significant negative impact on congestion and if this option is to be pursued it would require traffic modelling.

Guide price for modelling Options 1b and 1c - £6,000

Guide cost for construction - £30,000 - £70,000

A more precise cost for construction cannot be determined at this stage as it is dependent upon the condition of the existing signal equipment. A refurbishment of the existing signals is expected around 2019 and if works were to be coordinated with this it would likely result in a cost reduction.

### **3.5 Option 1d – Modify existing tactile paving (see drawing PC0811-03 Sheet 1)**

This option is to modify the existing tactile to comply with the current guidance and make it more easily understood to visually impaired pedestrians.

#### **Conclusion**

This option does not improve the island capacity but would make the crossing more recognisable to visually impaired pedestrians.

Guide for construction costs - £13,000 - £28,000

### 3.6 Other options considered

The option to widen the island on north side and widen the carriageway into north footway was considered and would have eliminated the need to reduce the carriageway by one lane. As with the south footway a significant number of utility apparatus are present. Adjustments would also have to be made to the signalised junction with the High Street to accommodate the carriageway widening increasing the cost significantly. This option was not pursued as it would be more expensive than and have no benefits over Option 1a.

Another option considered was the narrowing of traffic lanes on the north side of the island to allow the island to be widened. The Road Safety Team have recommended that the current lane widths of 3m are not reduced. To reduce the lane widths enough to widen the island by any significant amount would be unsafe. For these reasons this option was not pursued.

## **Location 2. Ashley Road.**

### **3.7 Option 2a – Widen footway in to bus layby (see drawing PC0811-03 Sheet 2)**

Widening the footway into existing bus layby (see Figure 4) increases the footway area outside the school by approximately 70m<sup>2</sup>.

#### **Conclusion**

Widening the footway at this location would significantly improve the capacity for pedestrians at school drop off and pick up times. It could result in increased congestion when bus stops in traffic lane. The Passenger Transport team were consulted and are happy with the proposal to widen the footway and relocate the existing bus cage into the carriageway as long as existing double yellow lines are retained to prevent parking around the bus stop. If this option was to be pursued consultation would have to take place with Clear Channel as the bus shelter is their asset and would require relocation or replacing.

Guide for construction costs - £25,000 - £35,000



Figure 4: Footway outside school in Ashley Road



### 3.8 Option 2b – Widen footway south of bus stop (see drawing PC0811-03 Sheet 2)

South of the bus stop there is an area of carriageway which is unused by vehicles, it would be possible to widen the existing 1.9m wide footway in to this space.

#### Conclusion

Widening at this location would improve the footway at a point where it narrows allowing for a better flow of pedestrians and making it easier for wheelchair users and pushchairs to pass. Whilst the option would increase footway capacity, the majority of pedestrians going to and from the school come from the direction of the High Street and this improvement would be of limited benefit to them.

Guide for construction costs - £10,000 - £15,000



Figure 5: Footway south of bus stop

**3.9 Option 2c – Increase pedestrian capacity of island (see drawing PC0811-03 Sheet 2)**

The limited standing area for pedestrians on the traffic island can be increased by approximately 9m<sup>2</sup> by converting some of the flower bed to footway.

**Conclusion**

This option would improve the capacity of the island. However the majority of pedestrians going to and from the school come from the direction of the High Street and this improvement would be of limited benefit to them.

Guide for construction costs - £10,000 - £15,000

**3.10 Option 2d – Widen island (see drawing PC0811-03 Sheet 2)**

This option would increase the limited standing area for pedestrians on the traffic island by approximately 16m<sup>2</sup> if combined with Option 8.

**Conclusion**

This option would further increase the capacity of the island when combined with Option 2c, however site observations indicate this additional capacity may not be required. The majority of pedestrians going to and from the school come from the direction of the High Street and this improvement would be of limited benefit to them.

Guide for construction costs - £10,000 - £15,000



Figure 6. Traffic island Ashley Road

### Option 3. Hersham Road Improvements.

#### 3.12 Option 3 – Hersham Road (see drawing PC0811-03 Sheet 2)

This option is to carry out minor improvements to the uncontrolled crossing in Hersham Road which is used by a number of parents and pupils. The current crossing has no tactile paving and the dropped crossing point is only 1m wide. This proposal would relocate and widen the crossing point to 1.6m and introduce tactile paving.

#### Conclusion

The introduction of tactile paving would improve the crossing for visually impaired users. Widening the crossing would make it easier to be accessed by wheelchair and pushchair users. Due to the crossing point currently being located on a narrow section of the island wheel chair and buggy users may overhang the carriageway when congregating on the island, relocating the crossing point allows for congregation on a wider section of the island. The majority of pedestrians going to and from the school do not use this island.

Guide for construction costs - £10,000 - £15,000



Figure 7. Traffic island Hersham Road



#### 4. **RECOMMENDATION:**

Based on existing pedestrian personal injury collision data alone it would be difficult to justify works in terms of reducing injuries when compared with other locations.

This said, it is clear that the area could benefit from pedestrian improvements.

The New Zealand Avenue crossing could benefit from improvements due to the limited capacity on the central island which results in overcrowding and pedestrians having to wait for the next green man. Improving this crossing would benefit the majority of pedestrians going to and from the school. It is recommended that modelling and trial holes are carried out to evaluate the impact options 1a, 1b and 1c would have on congestion and utility apparatus before progressing.

Option 2a (widen footway into the bus layby outside the school) is recommended as it would significantly improve the footway capacity outside the school and benefit all pedestrians going to and from the school.

Option 2b (widen footway south of bus stop) is recommended as it would provide additional footway capacity.

Options 2c and 2d (improve pedestrian island at Ashley Road) would provide some benefits to pedestrians and further investigation is recommended.

Option 3 (improve pedestrian island at Hersham Road) is recommended as it would make the crossing point easier to use for the visually impaired and safer for users congregating on the island as they would have access to the wider part of the island.

The options are summarised in the below table.

OPTION	SUMMARY	GUIDE PRICE	BENEFITS	RECOMMENDATION
<b>Loc 1</b>				
<b>1a</b>	Widen south side of island to increase pedestrian capacity	£59k - £140k (exc utility works)	Increases capacity, could require costly adjustment of utility apparatus.	Carry out modelling and trial holes to see if options 1a, b or c are viable <b>(£11,000)</b>
<b>1b</b>	Widen north side of island to increase pedestrian capacity	£39k - £100k (exc utility works)	Increases capacity, could have negative impact on congestion.	
<b>1c</b>	Single phase crossing	£30k - £70k	Eliminates the issue of capacity, could have negative impact on congestion.	
<b>1d</b>	Modify existing tactile paving to comply with current guidance	£13k-£28k	Tactile paving will be more easily understood by visually impaired.	Recommended
<b>Loc 2</b>				
<b>2a</b>	Widen footway into bus layby	£25k-£35k	Significantly improves pedestrian capacity outside school	Recommended
<b>2b</b>	Widen footway south of the bus stop	£10k-£15k	Improves footway capacity but would not benefit majority of pedestrians visiting the school.	Recommended
<b>2c</b>	Increase pedestrian capacity of island	£10k-£15k	Improves island capacity but would not benefit majority of pedestrians visiting the school.	Recommended
<b>2d</b>	Widen island	£10k-£15k	Further improves island capacity, has limited benefit and would not benefit majority of pedestrians visiting the school.	Recommended
<b>Loc 3</b>				
<b>3</b>	Hersham Road	£10k-£15k	Improves the crossing point for the visually impaired. Makes the crossing point safer for all users.	Recommended

This page is intentionally left blank