

# **D3920 Grotto Road, Weybridge Pedestrian Improvements**

**Feasibility Report**

**March 2020**

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Pedestrian Improvements

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## **1. INTRODUCTION:**

Grotto Road is a residential road that forms a link between Monument Road and Thames Street in Weybridge. There is a short section between Greside Road and the junction with Thames Street on the north side of Grotto Road where no footway exists for a length of approximately 22m. Local residents have expressed concerns about the risks of conflict between vehicles and vulnerable road users (pedestrians/local school children).

St George's Junior School is located in Thames Street north of the junction with Grotto Road. It is reported that a number of parents park in Greside Road, along with other nearby roads, and walk along the northern side of Grotto Road along the carriageway rather than cross to the southern side of the road to access Thames Street and the school entrance.

Surrey County Council have been asked to investigate improving accessibility for pedestrians at this junction. This report will consider ways of making safety and accessibility improvements for pedestrians in the short section that has no footway by either providing continuous footways or other improvements.

## **2. SITE ANALYSIS:**

The footway on the north side of Grotto Road, stops approximately 22m from the junction with Thames Street. The south side of the road has a 1.8m wide footway, where at the junction with Thames Street, leads to a tactile uncontrolled pedestrian crossing point over the opposite side of the road to a full length footway which runs in its entirety northbound to local residents and St George's Junior School and southbound into Weybridge Town Centre. Pedestrians, wishing to access the north side footway can choose to use this crossing to access the south side footway along Grotto Road and cross over to the north side at the point where the footway returns.

At its junction with Thames Street, Grotto Road's carriageway is narrow and is only 5.4m wide at the narrowest point.

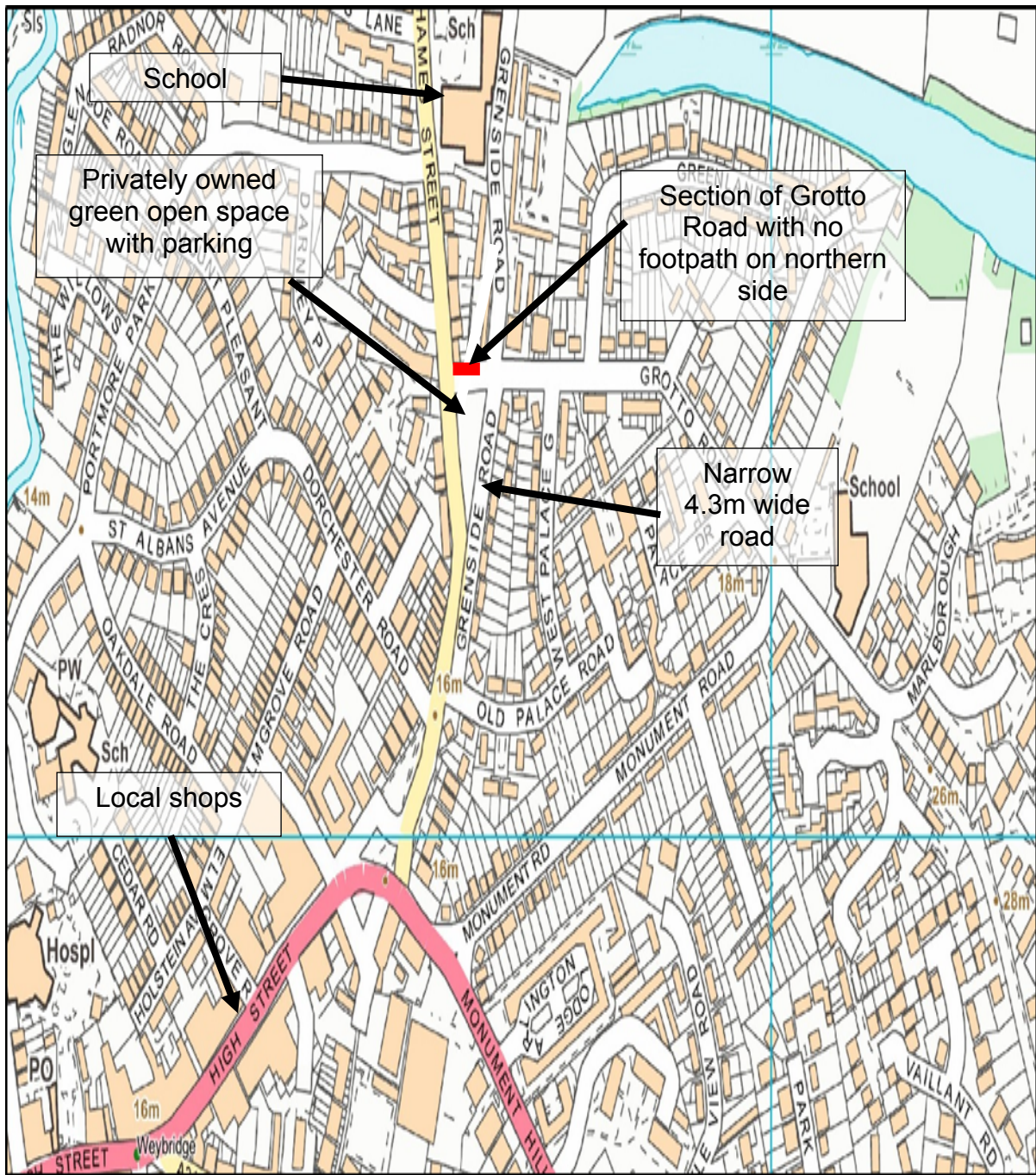


Fig 1. Location Plan





Fig 2. Section of Grotto Road with no footway viewed from Thames Street



Fig 3. Section of Grotto Road with no footway viewed from Grotto Road

Grotto Road is a residential road which is used as an access from Thames Street to a number of other residential roads. The southern end of Thames Street serves as a means for the local community to access local shops, restaurants and amenities to the south west.



To the south of this section of Grotto Road there is a green space and parking spaces owned by a Housing Association, the parking is accessed from a narrow 4.3m wide public road – (also known as Thames Street) on the east side of the open space. Vehicles park on eastern side of the carriageway within the narrow road (Fig 4).



Fig 4. Narrow road on east side of green

When crossing Grotto Road north to south visibility of southbound traffic in Thames Street is obscured by parked vehicles on the east side (Fig 5)



Fig 5. Parked cars blocking the view for pedestrians crossing south to north across Grotto Road



Fig 6. Private Green land on the south side of Grotto Road

A number of utility apparatus and street furniture are present within the southern footway of Grotto Road and the green space behind it. Further discussion on the possible consequences of these are within the proposed options.

### **3. DATA COLLECTION:**

#### **3.1 Personal Injury Collisions**

A study of personal injury collisions at the Grotto Road junction with Thames Street has been undertaken, for the last three full years and part of 2019, where data is available, given the period between 1<sup>st</sup> January 2016 and 30 November 2019. This showed that there were no personal injury collisions involving pedestrians. There were two vehicular collision's resulting in personal injury at this junction. Both collisions were the result of a driver exiting Grotto Road into the path of a northbound vehicle on Thames Street. The Police did not consider lack of visibility to be a causal factor.

<b>Last three year and year to date collisions (01/01/16 to 31/5/19)</b>			
<b>Year</b>	<b>Slight</b>	<b>Serious</b>	<b>Fatal</b>
<b>2016</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>2017</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>2018</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>2019 (Jan to 30Sep 2019)</b>	<b>2</b>	<b>0</b>	<b>0</b>
<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>



Fig 7. Personal Injury Collision Data

### 3.2 Highway Extents

The Highway Extents on Grotto Road and surrounding roads were obtained to understand what areas could be improved without having to acquire land.

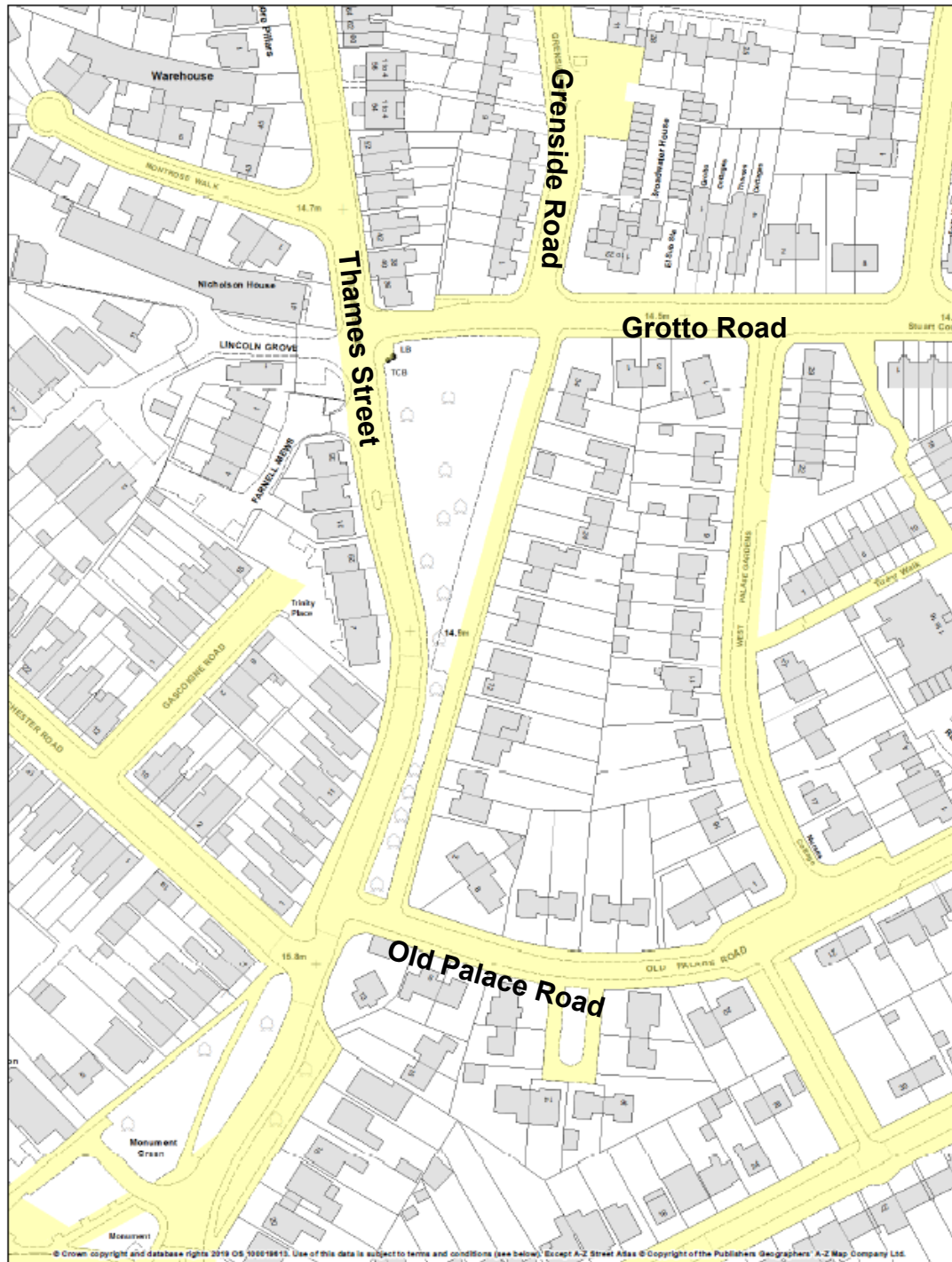


Fig 8. Highway Extent

### 3.3 Vehicle Turning Count Survey

To analyse how busy the junction of Grotto Road and Thames Street were Vehicle turning count surveys were undertaken over a seven day period from the 14<sup>th</sup> January to 20<sup>th</sup> January 2020. Vehicles were counted entering and exiting the Grotto Road/Thames Street Junction. Results are shown in Figures 9-12 below

Vehicles Entering Grotto Road (Thames Street Junction )	
Average hourly AM peak	79
Average hourly PM peak	100
Average Daily Vehicle Count – over a 7 day period	926

Fig 9. Average vehicle numbers entering Grotto Road junction with Thames Street

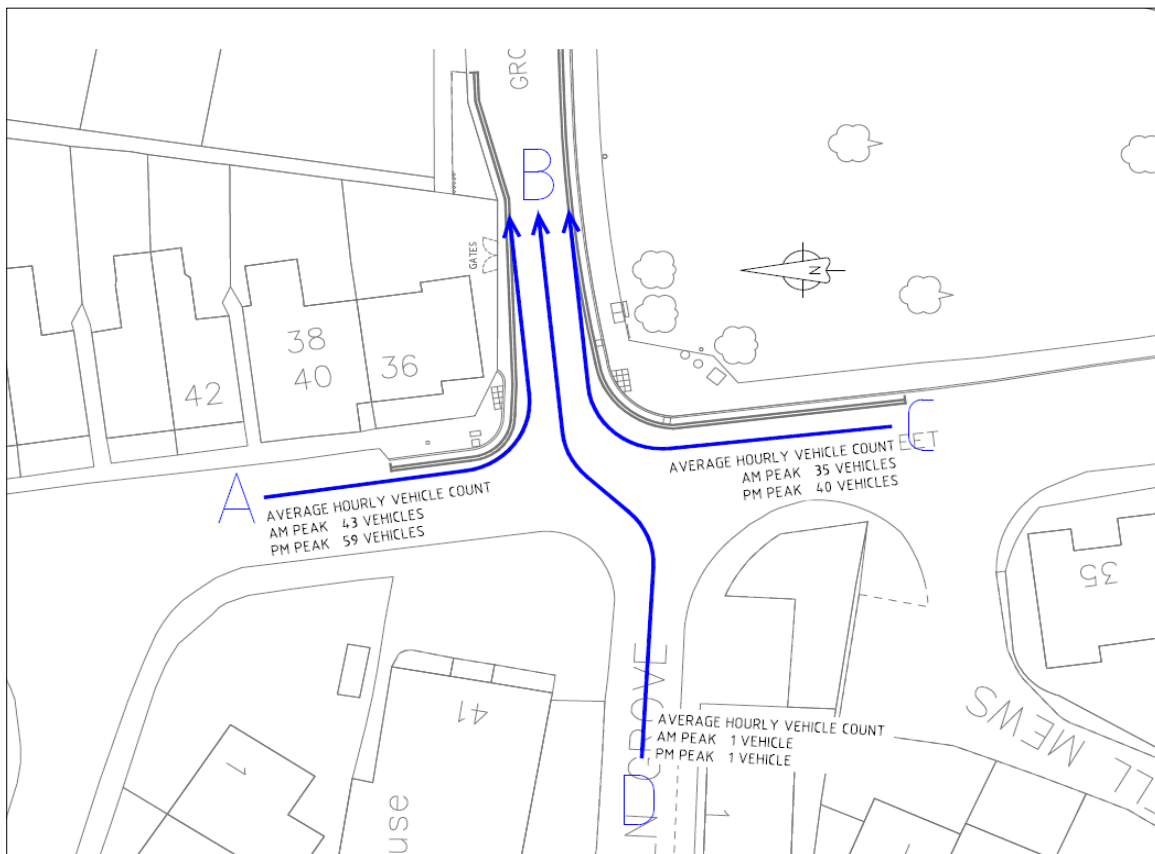


Fig 10. Vehicles entering Grotto Road/Thames Street Junction

Vehicles Exiting Grotto Road (Thames Street Junction)	
Average Hourly AM Peak	117
Average Hourly PM Peak	74
Average Daily Vehicle Count – (over a 7day period)	916

Fig 11. Average vehicle numbers exiting the Grotto Road/Thames Street Junction

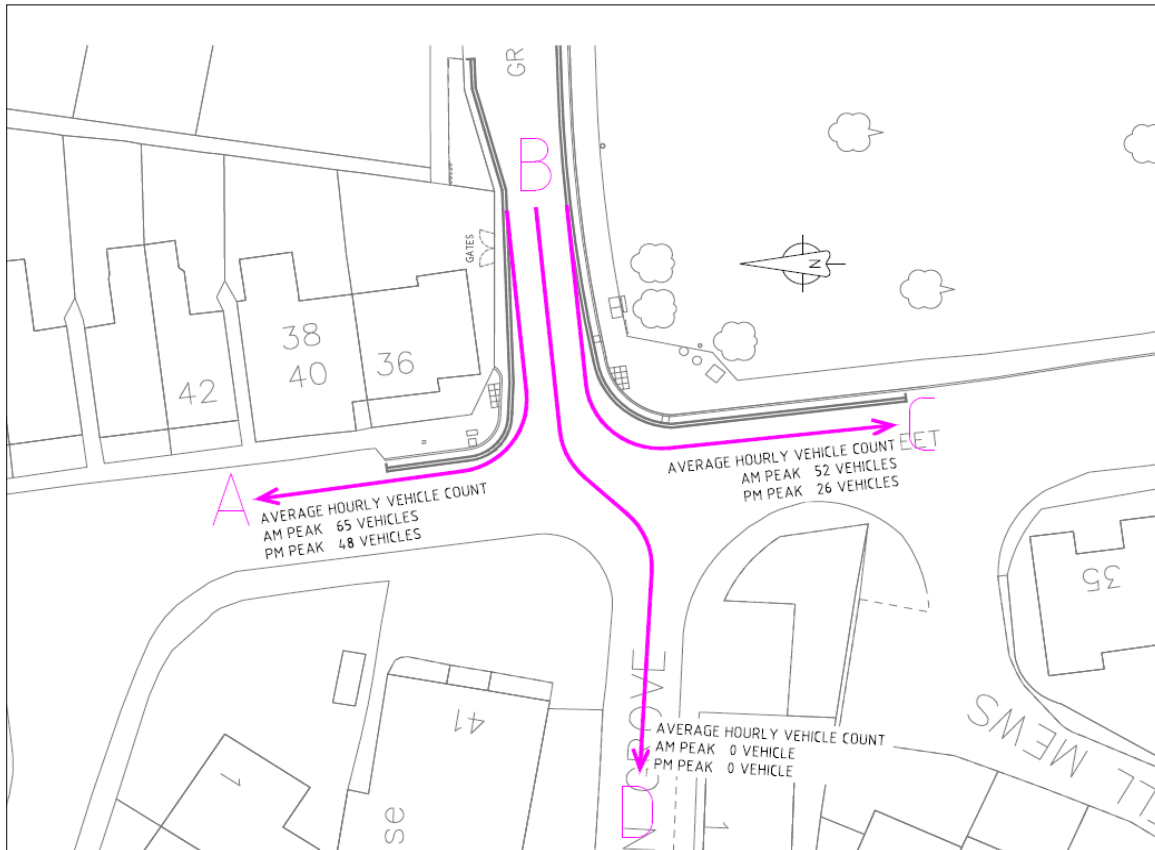


Fig 12. Vehicles exiting Grotto Road/Thames Street Junction

### 3.4 Pedestrian Count Survey

A pedestrian count survey was undertaken from 7am to 7pm on 16<sup>th</sup> January 2020. During the pedestrian survey numbers of pedestrians were recorded crossing the junction of Grotto Road and Thames Street north to south and south to north. Results are shown in Figures 13 -16 below.





Fig 13. Direction of pedestrians crossing Grotto Road/Thames Street Junction

	Adults	Children
Am Peak	72	4
Pm Peak	61	20
Daily Total	216	39

Fig 14. Pedestrian count crossing north to south



Fig 15. Direction of pedestrians crossing Grotto Road/Thames Street Junction

	Adults	Children
Am Peak	42	26
Pm Peak	35	5
Daily Total	177	37

Fig 16. Pedestrian count crossing south to north

#### **4. Discussion and Options:**

##### **4.1 Design and Road Safety Audit**

The feasibility designs are based on Ordnance Survey mapping. Detailed design would determine the exact highway widths available via topographical surveys as necessary. This would allow for confirmation of turning movements and available highway space.

An independent road safety audit has been undertaken on a number of the options where changes to the highway layout are proposed. Comments are included within the discussion of the options. Further independent safety audits would take place on any options that were to be progressed

#### 4.2 Option 1 – Do Nothing (Refer to drawing PC01032-01 Sheet 1)

This option looks at carrying out no works.

**Estimated Cost: £0**

##### Conclusion

Based on the lack of recorded evidence of collisions involving pedestrians which have resulted in personal injury, measures could not be justified in terms of casualty reduction when compared to other locations. However, we recognise the public's desire for improvements and as the Highway Authority Surrey County Council should be actively looking to provide improvements to the Highway network that could help to reduce personal injury collisions. These types of measures may also enhance the environment for residents and road users, and potentially encourage increased travel by sustainable methods such as walking or cycling.

#### 4.3 Option 2 – Continuous 1.8m footway on the northern side (Refer to drawing PC1032-01 Sheet 2)

This option looks at installing a continuous footway on the northern side of the road while maintaining two way traffic. Due to the width of the existing carriageway at this point it will only be possible to provide a continuous footway by acquiring some of the privately owned land on the south side. The carriageway and southern footway would have to be repositioned south to provide a continuous footway on the north side.

The uncontrolled crossing point at the junction with Thames Street has been relocated closer to the junction.

However, there are utility apparatus present in the footway that would need alterations/diversion in order for the new footway to be built. Works to relocate utility equipment can be very expensive. This would need to be confirmed by the New Roads and Street Works Act C3 enquiries if this option is progressed.

The adjacent green space and would require adjustment.

Estimate cost: £76,000 (plus utility diversion costs which could be of the order of *£10,000 upwards*). **This does not include acquisition of private land costs.**

##### Conclusion

This option provides a continuous footway for pedestrians with no negative impact on carriage way users. The relocated crossing point would make a minor

improvement to the visibility of pedestrians wishing to cross the road, although space to park one vehicle would be lost.

However, as there is insufficient highway land, it will be necessary to acquire privately owned land. In addition, it is anticipated that the cost of the necessary adjustment to utility apparatus could be prohibitive.

The road safety audit noted that several items of existing street furniture will need to be relocated within the proposed new footway to maximise the available footway width, all of which will be expensive.

The response to any request for action needs to be proportional to the recorded facts. In this instance, there are no recorded personal injury collisions involving pedestrians at this location. The additional costs involved would be difficult to justify given the anticipated level of use and the collision history.

Before taking this option forward it is recommended that discussions take place with the owner of the affected land and a detailed investigation is carried out into the costs of adjusting utility apparatus.

#### **4.4 Option 3a – Continuous 1.8m footway on the northern side and one way roads (Refer to drawing PC1032-01 Sheet 3)**

This option looks at installing a continuous footway on the northern side of the road. To avoid adjustment of utility apparatus it is proposed to convert the end section of Grotto Road to one way. Vehicles would access Grotto Road via Monument Road and the narrow road to the east of the green also known as Thames Street. Due to the narrowness of this road, it would also be necessary to change this section of Thames Street to one way. To maximise the width of the running lane, parking restrictions would be required to prevent on street parking.

Included within this option are markings for the privately owned parking area, the bays would be 3m wide to allow drivers to manoeuvre safely into the spaces from the narrow road. The surface of the parking area is in poor condition and would require remedial works before the markings could be laid. A property vehicle access is present within the proposed one way section of Grotto Road, the new footway would run across the vehicle access, the access will be maintained.

Estimated cost: £169,000

#### Conclusion

This option provides a continuous footway. The new parking restrictions could be contentious and a public consultation would need to be carried out, however it can be argued that parking within the road currently restricts the flow of traffic and as a result vehicles often park on the footway. To ascertain the number vehicles parking which would be affected by the restriction a survey would need to be carried out.



Markings for the privately owned bays would encourage more disciplined parking and maximise the use of space however, this would need to be agreed with the landowner. If an agreement could not be made with the landowner it would be possible to install the option without the marked parking bays. Before taking this option forward it is recommended that discussions take place with the owners of the affected land. A consultation with the local residents over the loss of on street parking would also be required.

#### **4.5 Option 3b – Continuous 1.8m footway on the northern side and one way roads (Refer to drawing PC1032-01 Sheet 4)**

This option also looks at installing a continuous footway on the northern side of the road with a one way system as in Option 3a. This option moves the private parking bays 2m west so that the road could be widened in order to preserve some on street parking. The existing surface of the parking area is in poor condition and would require remedial works before the markings could be laid. A property vehicle access is present within the proposed one way section of Grotto Road, the new footway would run across the vehicle access, the access will be maintained.

Estimated cost: £276,000

#### Conclusion

This option provides a continuous footway. However, it requires acquisition of privately owned land. The new parking restrictions could be unpopular, but would be an improvement on the restrictions of Option 3a. To ascertain the number vehicles parking which would be affected by the restriction a survey would need to be carried out. Markings for the privately owned bays would encourage more disciplined parking and maximise the use of space.

The road safety audit recommended that all on street parking should be removed as there is concern that footway parking is likely to occur. Pedestrians forced onto the carriageway in order to proceed are at increased risk of conflict with both vehicles using this narrow road and vehicles maneuvering into / out of the adjacent parking bays.

Before taking this option forward it is recommended that discussions take place with the owner of the affected land and a public consultation over the loss of on street parking.

#### **4.6 Option 4 – Pedestrian Crossing Improvements (Refer to drawing PC1032-01 Sheet 5)**

This option does not provide a continuous footway on the north side of Grotto Road but would provide improved crossing facilities to encourage pedestrians to cross the road to access the continuous footway on the south side.

A new uncontrolled crossing point is proposed approximately 35m from the Grotto Road junction with Thames Street. This would provide a facility for pedestrians to cross Grotto Road and use the south side footway to access Thames Street, without having to walk in the carriageway. Parking restrictions would be required on Grotto Road to safeguard visibility for both pedestrians and vehicles.

Two new uncontrolled crossing facilities with associated tactile paving are also proposed at the adjacent eastern Thames Street / Grotto Road and Grotto Road / Grenside Road junctions.

As the visibility for pedestrians crossing at the Grotto Road junction with Thames Street is compromised by on street parking and the property closest to the junction, the existing crossing has been repositioned towards the mouth of the junction. This will improve the visibility both for and for pedestrians. The introduction of parking restrictions in Thames Street would be required to further improve the visibility of those crossing at the junction.

Estimated cost: £14,000

#### **Conclusion**

This option will provide a lower cost alternative to the continuous footway, however it is possible that some pedestrians would still choose to walk in the carriageway.

The two new uncontrolled crossings will benefit all pedestrians, especially those who are visually impaired and/or wheelchair/pushchair users.

The new parking restrictions in Grotto Road would result in the loss of parking for two cars, but are essential to ensure the visibility of the crossing. The parking restrictions in Thames Street would improve the visibility of the junction crossing, but would result in the loss of parking for up to four vehicles outside a local convenience store which could be unpopular. Consultation with the local residents and businesses would be required due to the loss of on street parking.

#### **4.7 OPTIONS CONSIDERED BUT DISMISSED:**

- **One way in reverse direction.**

Reversing the one way direction of options 3a and 3b was considered. This would provide no additional benefit and the visibility of pedestrians crossing the junction of Grotto Road/ Thames Street is better in option 3a and 3b.

- **Build out on Grotto Road with dropped kerbs.**

A crossing point on a kerb build out in Grotto Road was considered as an alternative to the crossing point proposed in Option 4. However even though the crossing point would be on a build out, the adjacent building restricts visibility for pedestrians and motorists.

- **Build out Thames St/Grotto Rd junction.**

Building out of the kerb lines at the junction to make it easier for pedestrians to cross was considered, however simulated vehicle tracking shows that no improvements can be made without impeding entering and exiting vehicles.

## **5 RECOMMENDATION**

The response to any request for action needs to be proportional to the recorded facts. In this instance the facts relate to the recorded personal injury collisions involving pedestrians. Whilst the recorded data does not support the introduction of any measures, it is recognised that residents have asked for changes to be made, and that there is a risk of safety for pedestrians choosing to walk in the carriageway.

With consideration of likely available funding, and the potential to undertake works within the existing highway extents, Option 4 should be considered as a lower cost alternative to improve pedestrian accessibility in the vicinity. Anything greater than this, would be disproportionate to the evidenced need.



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