

# Highways & Transport – Traffic Management & Road Safety

## Technical Note

### Pedestrian Crossing Review 2020/21



**Author: Gavin Brewer**

**Senior Traffic Technician, Traffic Management & Road Safety**

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## 1. SUMMARY

This is a summary of the outcomes and recommendations of the 2020 - 21 Pedestrian Crossing Review. A total of 7 sites across Swindon have been reviewed.

Quantitative and qualitative data has been captured to inform on the current usage levels of the crossing points by pedestrians; the speed, volume and composition of traffic with which they have to compete; the characteristics of the road; and what the impact would be for the community should the existing crossing points be altered.

A calculation of the degree of conflict between pedestrians and motor vehicles has also been made, including a weighted version that takes into account other factors affecting pedestrians crossing the road. These calculations have then been used, alongside the qualitative data to determine whether the existing, new or improved crossing facilities are justified at each site.

The review has concluded that none of the seven sites should be classed as a 'priority' for amending the existing crossing facilities. Appendix A contains an overview of the report findings.

When no 'priority' sites have been identified, any sites that have been identified as a 'secondary' site in the current years' review are usually considered against 'secondary' sites from the previous years' review for consideration.

Identified 'secondary' sites in the current financial year are on Thames Avenue, near the junction with Pen Close, and Meadowcroft. The relocation of an existing uncontrolled crossing on the B4192 Purley Road, Liddington is also being considered as the recorded 85<sup>th</sup> percentile traffic speeds are above the posted speed limit.

'Secondary' sites that were not progressed further from the 2019-20 Review were both uncontrolled crossing points on Queens Drive, near Rushton Road, and the A346 Marlborough Road, Chiseldon. These sites were not considered further as the recorded pedestrian volumes at these locations were very low and met the threshold to become 'secondary' sites predominantly due to high vehicular flows. As a result of these lower pedestrian numbers, it is believed that there would be wider community benefit to consider

the 'secondary' sites from this current review for prioritisation, rather than those identified in 2019-20.

Due to the collision history of the site, the identified location to be prioritised is the provision of improved crossing facilities on Meadowcroft. As this site does not offer a link on Swindon's cycle network, and the recorded average/85<sup>th</sup> percentile traffic speeds are within the posted speed limit, the suggestion here would be to provide a Zebra crossing for pedestrians. However, as documented in Section 3.4, the length of road considered is sizable and therefore, further consideration will need to be given to the exact location of any crossing facilities.

## 2. INTRODUCTION

On an annual basis Officers undertake a review of sites throughout Swindon for where requests for new or improved crossing facilities have been received from a variety of sources, including MP's, Ward Councillors and Council Officers.

Quantitative and qualitative data is captured for each site and an assessment is made of whether new or improved crossing facilities are appropriate and required.

The quantitative data captured includes:

- 24 hour / 7 day traffic survey monitoring vehicle speeds and classification;
- 12-hour pedestrian survey monitoring the number of pedestrians crossing the road at a given location or within a defined area (maximum section length of 100 metres).

The pedestrians monitored are;

- Adults;
- Children, accompanied and unaccompanied (including children in pushchairs);
- Elderly persons;
- Disabled persons;
- The number of cyclists crossing the carriageway.

Long standing national practice has been to assess the justification for a crossing by calculating the  $PV^2$  ratio as an evaluation of the potential for conflict between pedestrians and vehicles.

Hourly pedestrian counts (P) and hourly traffic volumes (V) are used to calculate the  $PV^2$  figure for each site, for the four peak hours of pedestrian and vehicle movements. The resultant figure is used as a base figure showing the level of conflict between pedestrians and vehicles.

Where the average  $PV^2$  value of the four peak hours equals or exceeds  $1 \times 10^8$  then a crossing is to be considered as justified as a 'priority' site. In order to reach this figure, there should be a minimum of 1000 vehicles and 100 pedestrians using the crossing point in each of the peak four hours of the day.

In addition, a further weighted  $PV^2$  ratio that takes into consideration other factors influencing pedestrians crossing the road, the  $ADPV^2$  figure, is calculated. These factors are:

- A – accident factor taking into account the number of pedestrian injury collisions in last 3 years;
- D – a difficulty factor taking into account the width of the road, the posted speed limit and the number of lanes to be crossed;
- P – pedestrian volume, weighted to reflect the number of Under 16's, Over 65's and disabled persons, who may all take longer to cross the carriageway;
- V – traffic volume, weighted to reflect the percentage of HGVs and buses.

The resultant figure indicates a more detailed level of conflict between pedestrians and vehicles. This allows Officers further insight into the difficulties and complications experienced by pedestrians when crossing the road.

Where the average  $ADPV^2$  value of the four peak hours equals or exceeds  $3 \times 10^8$  then a crossing is considered to be justified. In order to reach this figure, assuming that the threshold of 1000 vehicles and 100 pedestrians across the four peak hours of the day is met, then approximately 10% of these vehicles would have to be buses/HGVs and 35% of pedestrians would fall into one of the weighted classifications discussed above. However, the percentages are flexible and could be lowered should there be a number of pedestrian injury collisions at the location in the most recent 3 years, or if the difficulty of crossing the road is considerably higher.

Qualitative data is captured for each site including whether a crossing would provide a link:

- To a school;
- To/on Swindon's cycle network;
- To local shops; or
- To local amenities.

Based on the above information, each site is categorised as either:

- A 'priority' site for new or improved crossing facilities;
- A 'secondary' site for consideration of new or improved crossing facilities subject to monies being available;
- No changes to the current situation required.

Should no 'priority' sites be identified in a review, then sites identified as 'secondary' are prioritised for funding against other 'secondary' sites from the previous year's review.

The style of crossing improvement identified for prioritised sites will depend on site circumstances and Officer's assessment of the safety risk associated with various crossing types relative to the intended location. Improvements may range between the provision of an uncontrolled pedestrian refuge, a zebra crossing, or a signal-controlled crossing. The approximate implementation costs of these crossing types, based on 2019/20 construction rates and subject to individual site characteristics, are as follows:

- |                              |   |
|------------------------------|---|
| • Pedestrian refuge          | £15,000   |
| • Zebra crossing             | £35,000   |
| • Signal-controlled crossing | £50-85,000 (depending on approach traffic speeds) |

The review of pedestrian crossing requests and delivery of prioritised sites operates on a two-year programme. Therefore, implementation of new or improved crossing facilities at prioritised sites will be progressed for delivery in the financial year following the review. The number of sites progressed for delivery will be subject to annual budget allocation.

The current collision record for sites under consideration for upgraded crossing facilities should be reviewed against the average rate, as the Traffic Signs Manual Chapter 6 (which has superseded the previously used Local Transport Note 1/95) advises, *"It should not be assumed that provision of a crossing will necessarily lead to a reduction in road accidents"*.

Analysis of Swindon's injury collision records shows that in the period 01/03/2017 – 29/02/2020, there have been 166 collisions involving pedestrians across the Borough (excluding M4 and A419). These resulted in five pedestrians receiving fatal injuries, 46 receiving serious injuries and 123 receiving slight injuries.

Seven of these collisions occurred at zebra crossings, resulting in eight pedestrian injuries (one of which was serious). Additionally, there were 37 collisions at signal-controlled crossings resulting in 38 pedestrian injuries, eight of which were serious. Therefore, using the most recent 3 years' worth of data available, on average in Swindon there are three pedestrians injured at zebra crossings and thirteen pedestrians injured at signal-controlled crossings per annum.

The 2020/21 pedestrian crossing review has looked at 7 sites across Swindon. The results and analysis of each site are contained below.



### 3. SITE ASSESSMENT

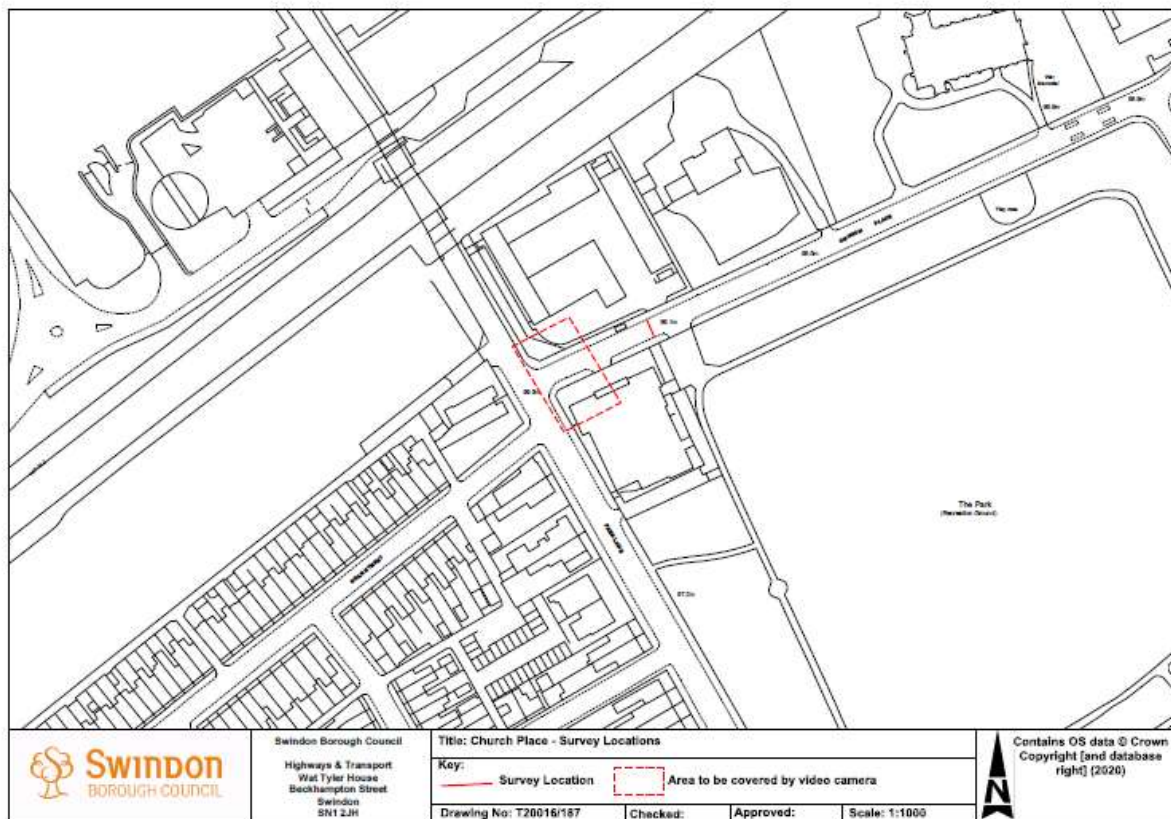
#### 3.1. Location: Church Place

Ward: Central

Parish: Central Swindon South

Description: Existing signal controlled junction between B4289 Park Lane and Church Place

#### Location Plan



*Location of crossing site marked by red box, location of traffic survey marked by red line (indicative only)*

This request was submitted by Swindon Borough Council’s Traffic Signal Engineer to ascertain the number of pedestrians on B4289 Park Lane crossing Church Place ahead of some imminent refurbishment work at the controlled junction. This section of Church Place is a 30mph single carriageway road with a footway on both sides. The junction is already signal-controlled, but the only pedestrian facility is an uncontrolled crossing within the

controlled area, meaning that pedestrians have to cross the road in an uncontrolled manner, between vehicle phases.

### Pedestrian Numbers

The pedestrian video survey took place on Thursday 1<sup>st</sup> October 2020 to capture the numbers and locations of pedestrians crossing the road. The survey was conducted over a 12-hour period, from 7am to 7pm. The following table illustrates the total number of pedestrians counted during this period.

	<b>Adults</b>	<b>Children (including pushchairs)</b>	<b>Elderly/Disabled</b>
Number of pedestrians	644	40	2

### Traffic Speeds and Volumes

An Automatic Traffic Counter (ATC) survey conducted for 7 days between the 30<sup>th</sup> September and 6<sup>th</sup> October 2020 to monitor vehicle speeds, volumes and classification. A summary of the collected data is below.

	<b>Eastbound</b>	<b>Westbound</b>
Average speed	19.1mph	20.3mph
85 <sup>th</sup> percentile speed	23.0mph	24.6mph
Average daily (7-day) flow	715 vehicles	773 vehicles

### Collision history

Interrogation of the injury collision database reveals there have been no reported pedestrian injury collisions within the area of interest in the latest 3-year period up to the end of February 2020.

### PV<sup>2</sup> and ADPV<sup>2</sup>

The degree of conflict between pedestrians and vehicles, the PV<sup>2</sup> (un-weighted) and ADPV<sup>2</sup> (weighted) values, have been calculated using the average of the four highest hours.

The PV<sup>2</sup> value has been calculated as:

$$PV^2 = 0.0181$$

The ADPV<sup>2</sup> value has been calculated as:

$$ADPV^2 = 0.0501$$

### Qualitative benefits

This site may offer a crossing facility to shops at the Outlet Centre and could link two bus stops. This crossing also provides a link to local amenities, namely Faringdon Park. However, this crossing does not provide a direct link on Swindon's cycle network, nor to any local schools.

### Conclusion

Neither the PV<sup>2</sup> nor ADPV<sup>2</sup> figures provide justification for a crossing facility at this location. However, in order to improve pedestrian safety at the junction it may be prudent to introduce a pedestrian facility at this junction, particularly due to the refurbishment work that is planned for the existing traffic signal infrastructure at this junction.

**3.2. Location: Thames Avenue**

Ward: Haydon Wick

Parish: Haydon Wick

Description: Informal crossing point near junction with Pen Close

Location Plan



*Location of crossing site marked by red box, location of traffic survey marked by red line (indicative only)*

This request was submitted by a local Ward Councillor for improved crossing facilities at an existing uncontrolled crossing point on Thames Avenue to assist residents and schoolchildren when crossing the road. This section of Thames Avenue is a 30mph single carriageway road with a footpath on both sides.

Pedestrian Numbers

The pedestrian video survey took place on Thursday 1<sup>st</sup> October 2020 to capture the numbers and locations of pedestrians crossing the road. The survey was conducted over a

12-hour period, from 7am to 7pm. The following table illustrates the total number of pedestrians counted during this period.

	<b>Adults</b>	<b>Children (including pushchairs)</b>	<b>Elderly/Disabled</b>
Number of pedestrians	165	87	0

### Traffic Speeds and Volumes

An Automatic Traffic Counter (ATC) survey conducted for 7 days between the 30<sup>th</sup> September and 6<sup>th</sup> October 2020 to monitor vehicle speeds, volumes and classification. A summary of the collected data is below.

	<b>Eastbound</b>	<b>Westbound</b>
Average speed	24.5mph	23.5mph
85 <sup>th</sup> percentile speed	28.5mph	27.2mph
Average daily (7-day) flow	3654 vehicles	4162 vehicles

### Collision history

Interrogation of the injury collision database reveals there have been no reported pedestrian injury collisions within the area of interest in the latest 3-year period up to the end of February 2020.

### PV<sup>2</sup> and ADPV<sup>2</sup>

The degree of conflict between pedestrians and vehicles, the PV<sup>2</sup> (un-weighted) and ADPV<sup>2</sup> (weighted) values, have been calculated using the average of the four highest hours.

The PV<sup>2</sup> value has been calculated as:

$$PV^2 = 0.2443$$

The ADPV<sup>2</sup> value has been calculated as:

$$ADPV^2 = 0.7315$$

### Qualitative benefits

This site may offer a crossing facility to Greenmeadow Primary School, particularly evidenced as this used to be a previous School Crossing Patrol site. However, this crossing

does not provide a direct link on Swindon's cycle network, nor to any shops or local amenities.

### Conclusion

Whilst the  $PV^2$  does not provide justification for improved crossing facilities, the  $ADPV^2$  figure suggests that, due to the additional weighting used in this calculation, this should be considered as a 'secondary' site.

The pedestrian numbers peak during the school rush hours, and there is a significant reduction in these numbers outside of these times. This reduction in pedestrian movements, along with the low numbers of buses and HGVs using this route, has contributed to this site remaining as a 'secondary' site rather than crossing the threshold to become a primary site.

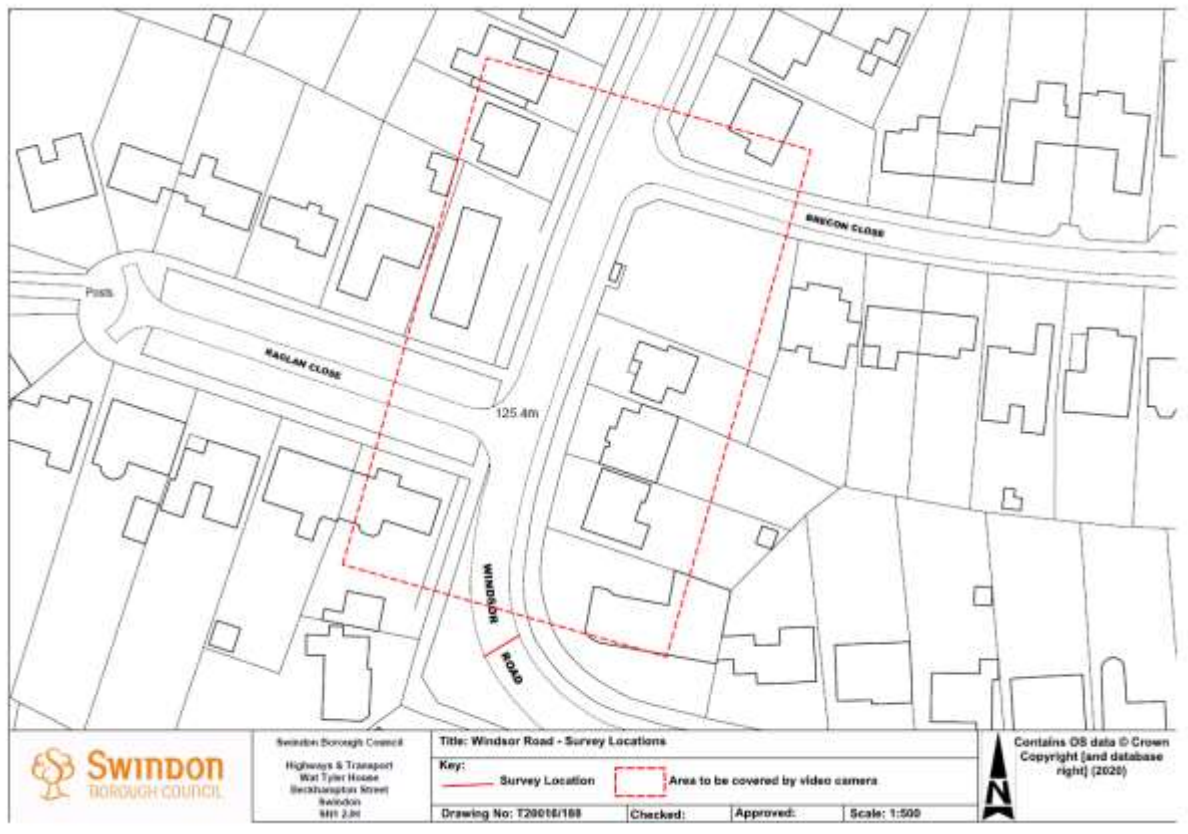
**3.3. Location: Windsor Road**

Ward: Lawn & Chiseldon

Parish: Central Swindon South

Description: Near junctions with Raglan Close and Brecon Close

Location Plan



*Location of crossing site marked by red box, location of traffic survey marked by red line (indicative only)*

This request was submitted by a local Ward Councillor for crossing facilities on Windsor Road to assist residents and schoolchildren when crossing the road. This section of Windsor Road is a 30mph single carriageway road with a footpath on both sides.

Pedestrian Numbers

The pedestrian video survey took place on Thursday 1<sup>st</sup> October 2020 to capture the numbers and locations of pedestrians crossing the road. The survey was conducted over a

12-hour period, from 7am to 7pm. The following table illustrates the total number of pedestrians counted during this period.

	<b>Adults</b>	<b>Children (including pushchairs)</b>	<b>Elderly/Disabled</b>
Number of pedestrians	89	29	0

### Traffic Speeds and Volumes

An Automatic Traffic Counter (ATC) survey conducted for 7 days between the 30<sup>th</sup> September and 6<sup>th</sup> October 2020 to monitor vehicle speeds, volumes and classification. A summary of the collected data is below.

	<b>Northbound</b>	<b>Southbound</b>
Average speed	20.2mph	19.4mph
85 <sup>th</sup> percentile speed	22.5mph	21.9mph
Average daily (7-day) flow	1607 vehicles	1653 vehicles

### Collision history

Interrogation of the injury collision database reveals there have been no reported pedestrian injury collisions within the area of interest in the latest 3-year period up to the end of February 2020.

### PV<sup>2</sup> and ADPV<sup>2</sup>

The degree of conflict between pedestrians and vehicles, the PV<sup>2</sup> (un-weighted) and ADPV<sup>2</sup> (weighted) values, have been calculated using the average of the four highest hours.

The PV<sup>2</sup> value has been calculated as:

$$PV^2 = 0.0245$$

The ADPV<sup>2</sup> value has been calculated as:

$$ADPV^2 = 0.0486$$

### Qualitative benefits

The provision of a crossing improvement at this site may offer a crossing facility to Lawn Primary School. However, this crossing does not provide a direct link on Swindon's cycle network, nor to any shops or local amenities.



## Conclusion

Neither the PV<sup>2</sup> nor ADPV<sup>2</sup> figures provide justification for a crossing facility at this location. Whilst some benefit may be provided for the local community in accessing Lawn Primary School, it is not recommended this site is considered further.

**3.4. Location: Meadowcroft**

Ward: Penhill & Upper Stratton

Parish: Stratton St Margaret

Description: From the junction with Burns Way to the junction with Derwent Drive

Location Plan



*Location of crossing site marked by red box, location of traffic survey marked by red line (indicative only)*

This request was submitted by the Cabinet Member and a local Ward Councillor for crossing facilities on Meadowcroft to assist residents and schoolchildren when crossing the road. This section of Meadowcroft is a 30mph single carriageway road with a footpath on both sides.

Pedestrian Numbers

The pedestrian video survey took place on Thursday 1<sup>st</sup> October 2020 to capture the numbers and locations of pedestrians crossing the road. The survey was conducted over a

12-hour period, from 7am to 7pm. The following table illustrates the total number of pedestrians counted during this period.

	<b>Adults</b>	<b>Children (including pushchairs)</b>	<b>Elderly/ Disabled</b>	<b>Total number of pedestrians</b>
Number of pedestrians in Section A (Burns Way to Davenwood)	130	59	0	189
Number of pedestrians in Section B (Davenwood to Dockle Way)	37	33	0	70
Number of pedestrians in Section C (Dockle Way to Lansbury Drive)	64	28	0	92
Number of pedestrians in Section D (Lansbury Drive to Derwent Drive)	116	62	0	178

### Traffic Speeds and Volumes

An Automatic Traffic Counter (ATC) survey conducted for 7 days between the 30<sup>th</sup> September and 6<sup>th</sup> October 2020 to monitor vehicle speeds, volumes and classification. A summary of the collected data is below.

	<b>Eastbound</b>	<b>Westbound</b>
Average speed	23.7mph	24.0mph
85 <sup>th</sup> percentile speed	27.8mph	27.8mph
Average daily (7-day) flow	2035 vehicles	1975 vehicles

### Collision history

Interrogation of the injury collision database reveals there has been one 'Slight' pedestrian injury collision within the area of interest in the latest 3-year period up to the end of February 2020.

This collision occurred between Lansbury Drive and the western junction with Derwent Drive at 8:35am on Wednesday 7<sup>th</sup> March 2018. The casualty was a 12 year old female pedestrian travelling in a northerly direction.

### PV<sup>2</sup> and ADPV<sup>2</sup>

The degree of conflict between pedestrians and vehicles, the PV<sup>2</sup> (un-weighted) and ADPV<sup>2</sup> (weighted) values, have been calculated using the average of the four highest hours.

The PV<sup>2</sup> value has been calculated as:

$$PV^2 = 0.1635$$

The ADPV<sup>2</sup> value has been calculated as:

$$ADPV^2 = 0.5164$$

### Qualitative benefits

The provision of a crossing at a site within this study area may offer a crossing facility to St Catherine's Catholic Primary School, Ruskin Junior School and Kingsdown School. However, a crossing within this area would not provide a direct link on Swindon's cycle network, nor to any shops or local amenities.

### Conclusion

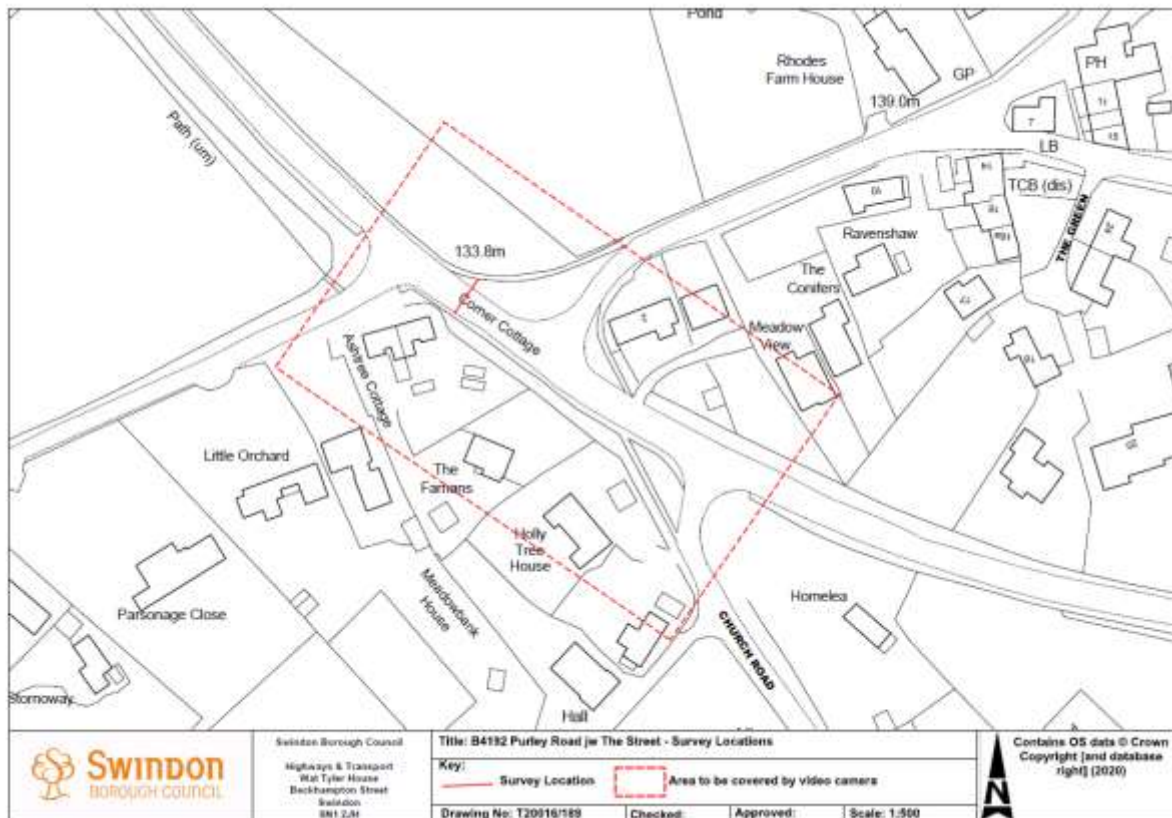
Whilst the PV<sup>2</sup> does not provide justification for improved crossing facilities, the ADPV<sup>2</sup> figure suggests that, due to the additional weighting used in this calculation, this should be considered as a 'secondary' site.

The pedestrian numbers peak during the school rush hours, and although there is a reduction in pedestrian numbers outside of these hours, the number of people crossing the road is fairly consistent. The site's collision history is the factor that has increased the ADPV<sup>2</sup> value to ensure it qualifies as a 'secondary' site. Without this, the figures would not have been high enough for this site to qualify for further consideration.

As the area of Meadowcroft that being considered is substantial, it is unlikely that there would be one single solution that provides an optimal crossing point for every pedestrian. As a result, it may be prudent considering improvements to one of the locations that saw the higher numbers of pedestrian movements (Sections A and D). Further consultation with local stakeholders would be required to understand the best possible location for a crossing.

**3.5. Location: B4192 Purley Road**  
 Ward: Ridgeway  
 Parish: Liddington  
 Description: Existing uncontrolled crossing near The Street

Location Plan



*Location of crossing site marked by red box, location of traffic survey marked by red line (indicative only)*

This request was submitted by a local Ward Councillor for a review of the crossing facilities on the B4192 Purley Road to ascertain whether the location of the existing uncontrolled crossing, east of The Street, is optimal for residents wishing to cross the road, or whether pedestrian numbers are sufficient for consideration to be given to moving the crossing point to the west of The Street. This section of B4192 Road is a 30mph single carriageway road with a footpath on both sides.

Pedestrian Numbers

The pedestrian video survey took place on Thursday 1<sup>st</sup> October 2020 to capture the numbers and locations of pedestrians crossing the road. The survey was conducted over a 12-hour period, from 7am to 7pm. The following table illustrates the total number of pedestrians counted during this period.

	<b>Adults</b>	<b>Children (including pushchairs)</b>	<b>Elderly/Disabled</b>
Number of pedestrians	34	2	2

### Traffic Speeds and Volumes

An Automatic Traffic Counter (ATC) survey conducted for 7 days between the 30<sup>th</sup> September and 6<sup>th</sup> October 2020 to monitor vehicle speeds, volumes and classification. A summary of the collected data is below.

	<b>Eastbound</b>	<b>Westbound</b>
Average speed	31.3mph	30.9mph
85 <sup>th</sup> percentile speed	39.3mph	36.8mph
Average daily (7-day) flow	1965 vehicles	1929 vehicles

Liddington Parish Council also operate their own Speed Indicator Device (SID) deployment programme and have been sharing the results of this with the Traffic Management & Road Safety team. The data recorded and shared by the Parish Council concurs with the above table in that weekly average and 85<sup>th</sup> percentile speeds for traffic in both directions exceeds the posted speed limit of 30mph. The nearest deployment site to the crossing location is approximately 350 metres away in a north-westerly direction. The most recent data collected here (28<sup>th</sup> December 2020 – 14<sup>th</sup> February 2021) shows that for north-westbound vehicles average speeds were 34.9mph and the average 85<sup>th</sup> percentile speeds were 40.6mph.

### Collision history

Interrogation of the injury collision database reveals there have been no reported pedestrian injury collisions within the area of interest in the latest 3-year period up to the end of February 2020.

### PV<sup>2</sup> and ADPV<sup>2</sup>

The degree of conflict between pedestrians and vehicles, the PV<sup>2</sup> (un-weighted) and ADPV<sup>2</sup> (weighted) values, have been calculated using the average of the four highest hours.

The PV<sup>2</sup> value has been calculated as:

$$PV^2 = 0.0067$$

The ADPV<sup>2</sup> value has been calculated as:

$$ADPV^2 = 0.0190$$

### Qualitative benefits

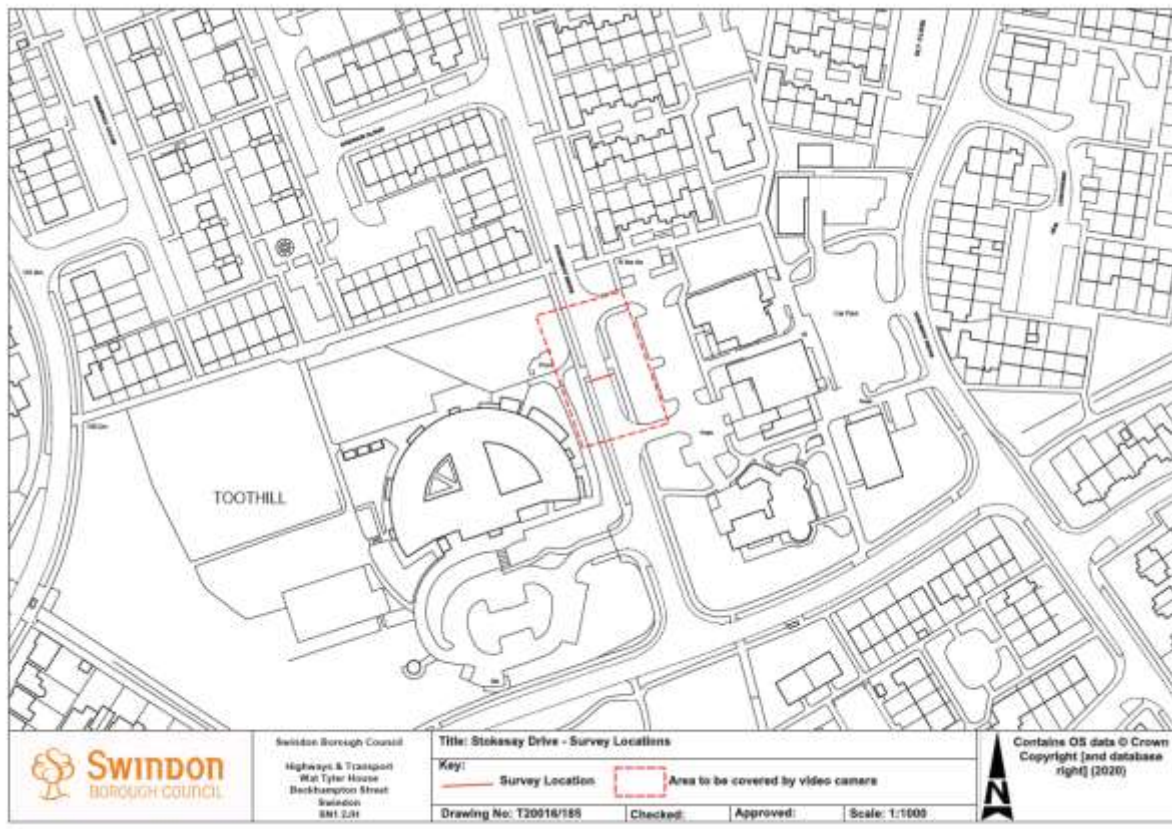
The repositioning of this crossing point may offer a safer crossing facility to local amenities, such as the Church and Village Hall. It may also offer a more attractive location to cross as it is slightly further from the bend. Westbound vehicles may be unsighted to the current crossing, which could be a considerable problem as vehicles are regularly recorded approaching the site at speeds higher than the posted speed limit. However, this crossing does not provide a direct link on Swindon's cycle network, nor to any shops or schools.

### Conclusion

Neither the PV<sup>2</sup> nor ADPV<sup>2</sup> figures provide justification for an improved crossing facility at this location. However, due to the recorded vehicle speeds being considerably higher than the posted speed limit, and the road layout not being conducive for pedestrians crossing at its current location, it is recommended that the relocation of the crossing point be considered further.

- 3.6. Location: Stokesay Drive**
- Ward: Mannington & Western
- Parish: West Swindon
- Description: Outside Hazelwood Academy

Location Plan



*Location of crossing site marked by red box, location of traffic survey marked by red line (indicative only)*

This request was submitted by Hazelwood Academy and endorsed by a local Ward Councillor for improved crossing facilities at an existing uncontrolled crossing point on Stokesay Drive to assist residents and schoolchildren when crossing the road. This section of Stokesay Drive is a 30mph single carriageway road with a footpath on both sides.

Pedestrian Numbers

The pedestrian video survey took place on Thursday 1<sup>st</sup> October 2020 to capture the numbers and locations of pedestrians crossing the road. The survey was conducted over a



12-hour period, from 7am to 7pm. The following table illustrates the total number of pedestrians counted during this period.

	<b>Adults</b>	<b>Children (including pushchairs)</b>	<b>Elderly/Disabled</b>
Number of pedestrians	488	229	1

### Traffic Speeds and Volumes

An Automatic Traffic Counter (ATC) survey conducted for 7 days between the 30<sup>th</sup> September and 6<sup>th</sup> October 2020 to monitor vehicle speeds, volumes and classification. A summary of the collected data is below.

	<b>Northbound</b>	<b>Southbound</b>
Average speed	24.9mph	28.9mph
85 <sup>th</sup> percentile speed	31.4mph	35.3mph
Average daily (7-day) flow	581 vehicles	794 vehicles

### Collision history

Interrogation of the injury collision database reveals there have been no reported pedestrian injury collisions within the area of interest in the latest 3-year period up to the end of February 2020.

### PV<sup>2</sup> and ADPV<sup>2</sup>

The degree of conflict between pedestrians and vehicles, the PV<sup>2</sup> (un-weighted) and ADPV<sup>2</sup> (weighted) values, have been calculated using the average of the four highest hours.

The PV<sup>2</sup> value has been calculated as:

$$PV^2 = 0.0148$$

The ADPV<sup>2</sup> value has been calculated as:

$$ADPV^2 = 0.0407$$

### Qualitative benefits

This site may offer a crossing facility to some local shops, amenities and Hazelwood Academy, particularly as this used to be the same location where there used to be an active

School Crossing Patrol. However, this crossing does not provide a direct link on Swindon's cycle network.

### Conclusion

Neither the  $PV^2$  nor  $ADPV^2$  figures provide justification for a crossing facility at this location. Due to concerns being raised about conducting the traffic surveys between lockdowns and the effect this would have on vehicle flows, the calculations have been conducted again using historic data from 2016. Whilst evident that flows were reduced in the 2020 data, the figures produced by this recalculation also did not meet the threshold for this to become either a 'primary' or 'secondary' site, and therefore, it is not recommended this site is considered further.

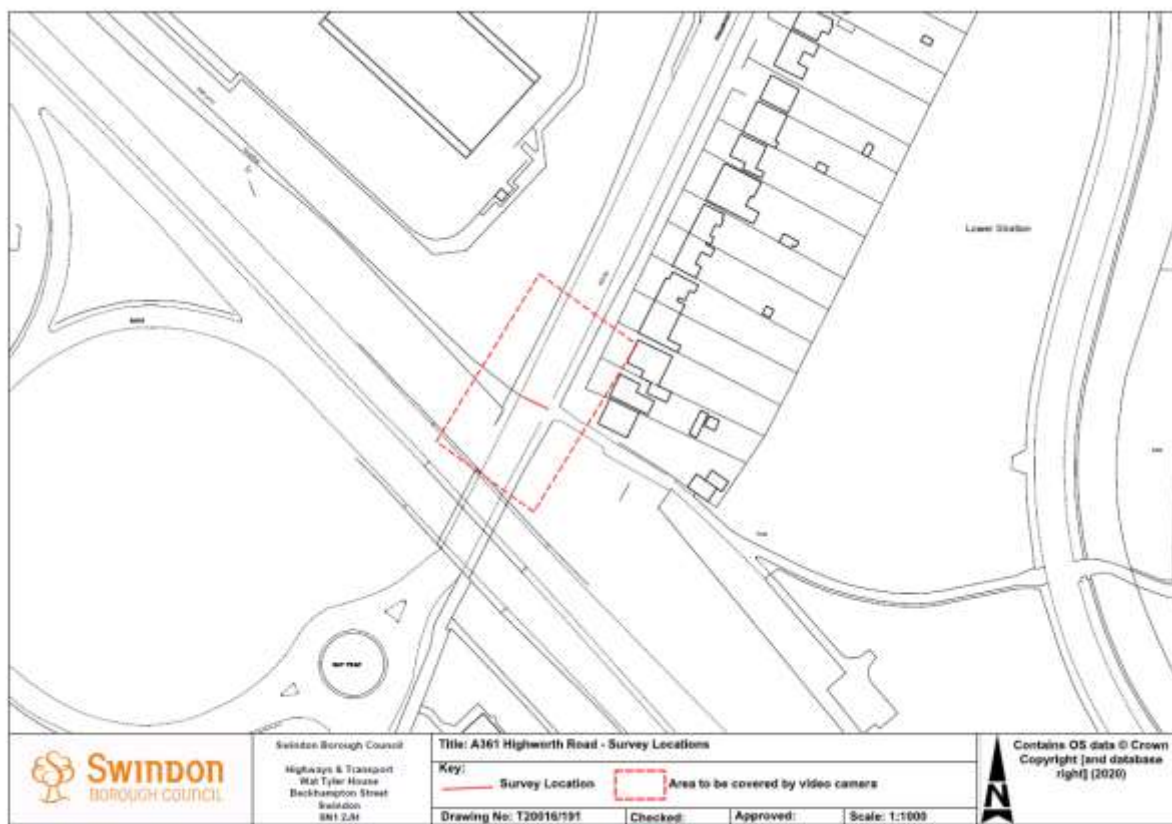
**3.7. Location: A361 Highworth Road**

Ward: St Margaret & South Marston

Parish: Stratton St Margaret

Description: Uncontrolled crossing point linking path near the TNT depot to segregated shared use route leading to A361 - north of Rat Trap Roundabout

Location Plan



*Location of crossing site marked by red box, location of traffic survey marked by red line (indicative only)*

This request was submitted by a local Ward Councillor for improved crossing facilities at an existing uncontrolled crossing point on the A361 Highworth Road to assist pedestrians when crossing the road. This section of A361 Highworth Road Drive is a 40mph single carriageway road with 3 lanes. There is a footpath on one side, running parallel to the main road, whilst a

segregated shared use route meets this footpath at the crossing location. There is a footpath directly opposite this shared use route, running in a north-westerly direction.

### Pedestrian Numbers

The pedestrian video survey took place on Thursday 1<sup>st</sup> and Saturday 3<sup>rd</sup> October 2020 to capture the numbers and locations of pedestrians crossing the road. The survey was conducted over a 12-hour period, from 7am to 7pm. The following table illustrates the total number of pedestrians counted during these periods.

	<b>Adults</b>	<b>Children (including pushchairs)</b>	<b>Elderly/Disabled</b>
Number of pedestrians (Weekday)	20	4	0
Number of pedestrians (Saturday)	12	2	0

### Traffic Speeds and Volumes

An Automatic Traffic Counter (ATC) survey conducted for 7 days between the 30<sup>th</sup> September and 6<sup>th</sup> October 2020 to monitor vehicle speeds, volumes and classification. A summary of the collected data is below.

	<b>Northbound</b>	<b>Southbound</b>
Average speed	28.7mph	34.1mph
85 <sup>th</sup> percentile speed	33.6mph	39.9mph
Average daily (7-day) flow	8471 vehicles	6574 vehicles

A summary of the data collected on Saturday 3<sup>rd</sup> October 2020 can be found below.

	<b>Northbound</b>	<b>Southbound</b>
Average speed	30.3mph	36.1mph
85 <sup>th</sup> percentile speed	34.0mph	40.5mph
Average daily (7-day) flow	6491 vehicles	5407 vehicles

### Collision history

Interrogation of the injury collision database reveals there have been no reported pedestrian injury collisions within the area of interest in the latest 3-year period up to the end of February 2020.

### PV<sup>2</sup> and ADPV<sup>2</sup>

The degree of conflict between pedestrians and vehicles, the PV<sup>2</sup> (un-weighted) and ADPV<sup>2</sup> (weighted) values, have been calculated using the average of the four highest hours.

The weekday PV<sup>2</sup> value has been calculated as:

$$PV^2 = 0.0583$$

The weekday ADPV<sup>2</sup> value has been calculated as:

$$ADPV^2 = 0.3057$$

The weekend PV<sup>2</sup> value has been calculated as:

$$PV^2 = 0.0149$$

The weekend ADPV<sup>2</sup> value has been calculated as:

$$ADPV^2 = 0.0832$$

### Qualitative benefits

This site may offer a crossing facility to some employment areas and does have some interaction with Swindon's Cycle Network, although does not offer a link. However, this crossing does not provide a link to a local school or any shops.

### Conclusion

Neither the PV<sup>2</sup> nor ADPV<sup>2</sup> figures provide justification for a crossing facility at this location. Despite very high traffic volumes in comparison to the other sites considered in this review, both weekday pedestrian usage of this existing uncontrolled crossing is very low and therefore it is not recommended this site is considered further.

**APPENDIX A**

Road name	Ward	ADPV <sup>2</sup> x 10 <sup>8</sup>	PV <sup>2</sup> x 10 <sup>8</sup>	ADPV <sup>2</sup> Category	PV <sup>2</sup> Category	Total No. of Pedestrians (7am-7pm)	Decision
Church Place	Central	0.0501	0.0181	3	3	<b>686</b>	NFA - works to be covered by refurbishment
Thames Avenue	Haydon Wick	0.7315	0.2443	2	3	<b>252</b>	Add to secondary list
Windsor Road	Chiseldon & Lawn	0.0486	0.0245	3	3	<b>118</b>	NFA
Meadowcroft	Penhill & Upper Stratton	0.5164	0.1635	2	3	<b>529</b>	Add to secondary list
B4192 Purley Road	Ridgeway	0.0190	0.0067	3	3	<b>38</b>	Add to secondary list
Stokesay Drive	Mannington & Western	0.0407	0.0148	3	3	<b>718</b>	NFA
A361 Highworth Road (weekday)	St Margaret & South Marston	0.3057	0.0583	3	3	<b>24</b>	NFA
A361 Highworth Road (weekend)	St Margaret & South Marston	0.0832	0.0149	3	3	<b>14</b>	NFA

