



Integrated Transport Feasibility Study

ICTP-2017-12 A606 Langham

REVISION SCHEDULE					
Rev	Date	Details	Prepared by	Reviewed by	Approved by
A					

Contents

1 Site Description.....5

2 Pedestrian Crossing Assessments 11

3 Accident Data & Analysis 16

4 Speed Survey 17

5 Option21

6 Recommendation.....24

Appendix A - LTN1/95 Assessment

Appendix B - Accident Data

Appendix C - Speed Survey Data

Appendix D - Preliminary Scheme Drawings

Introduction

This feasibility is to assess if there is a speeding problem through Langham along the A606 and to assess if there is a need for improved cross points for pedestrian safety. The crossing points focused on in this feasibility study are the junction of Burley Road and Melton Road, and the section of carriageway between Well Street and The Range.

The pedestrian crossing assessment was carried out using a 1/95 Assessment and site survey for 5 days, between 7:30am to 9:30am and 2:30pm to 4pm.

The speed assessment was carried out using RCC's speed survey equipment. This was installed on site for 7 days. It monitored the size of the vehicles and the speed of the vehicles travelling through the village.

1 Site Description

Langham is a village situated on the A606 between Oakham and Melton Mowbray. The A606 can be used to access the A1 and the A607, and is also the main route for those travelling north to Nottingham or Derby, from Oakham, Uppingham or Stamford.

The speed limit on the north-bound approach to Langham is 40mph, this reduces to 30mph, 230m south of the junction with Burley Road.

The speed limit throughout the village is 30mph and this increases to national speed limit (60mph) west of the junction of Whissendine Road.



The approach to Langham along the A606 from Oakham is a long straight road. This section of road already benefits from some gateway features, such as large village name plate on yellow backing, wooden gateways, dragon teeth markings and red high friction surfacing. The white lines and high friction surfacing at this location have faded over time but are still visible.



Throughout the village there are various traffic calming features, such as red friction surfacing with SLOW markings and speed indicator devices. The geometry of the road also lends itself to traffic calming through two tight bends. Examples of the traffic calming features in Langham are shown below:

Red high friction surfacing with SLOW markings – this has been faded over time but is still visible.



SID just south of Burley Road for north bound traffic



SID just north of Manor Lane for south bound traffic



South of the junction of Burley Road and the A606, there is an uncontrolled pedestrian crossing comprising of a pedestrian refuge island. This crossing is used by parents and children to access the primary school adjacent to the A606 and residents walking towards Oakham.

This is the only formal crossing point throughout Langham.

For the remainder of its length through Langham there are no formal crossing points, or formal pedestrian dropped kerb crossings including tactile paving. Further information relating to pedestrian crossing points has been assessed in Section 2 Pedestrian Crossing Assessments, including an LTN 1/95 assessment of this and other potential crossing points



West of Burley Road junction, there is a solid white lines system, until just north of Cold Overton Road. There are no pedestrian crossing points along this section of road. There is a footpath on both the north and south side of the carriageway. The footpath on the south is 1.2m wide and the footpath on the north side is 1.8m wide, however is reduced at some locations due to overgrown vegetation.

There is a sharp right hand bend at the Cold Overton Road junction, this helps with traffic calming as vehicles are forced to slow down. The footpath along this section of road is reduced down to 1m. Due to the road layout and highway boundary, there is no scope to widen the footpath at this location.





Between Cold Overton Road junction and Whissendine Road, the road is relatively straight, with two gentle sweeping bends. The road benefits from a footpath to the eastern side of the road, measuring 1.3m wide, from Burley Road up to the junction with Cold Overton Road, continuing to Manor Lane.

There is footpath on the western side of the road from opposite Well Street to Ranksborough Drive. The footpath has reduced in size due to overgrown vegetation encroaching onto the footpath. This has caused the footpath to be narrowed to 1.2m adjacent to the entrance to Ranksborough Drive.



The northern end of Langham benefits from a similar gateway to the southern end; a large village name plate on yellow backing, wooden gateways, dragon's teeth markings and red high friction surfacing.

The 30mph limit is just outside of the village limits and could be seen as open country side by drivers as there is no discernible change in the surrounding landscape.



Department for Transport Circular 01/2013 specified that speed limits should be evidence-led and self-explaining and seek to reinforce people's assessment of what is a safe speed to travel. They should encourage self-compliance.

Table 1 Speed limits in urban areas – summary

Speed limit (mph)	Where limit should apply
20 (including 20 mph zone)	In streets that are primarily residential and in other town or city streets where pedestrian and cyclist movements are high, such as around schools, shops, markets, playgrounds and other areas, where motor vehicle movement is not the primary function.
30	In other built-up areas (where motor vehicle movement is deemed more important), with development on both sides of the road.
40	On higher quality suburban roads or those on the outskirts of urban areas where there is little development, with few cyclists, pedestrians or equestrians. On roads with good width and layout, parking and waiting restrictions in operation, and buildings set back from the road. On roads that, wherever possible, cater for the needs of non-motorised users through segregation of road space, and have adequate footways and crossing places.
50	On dual carriageway ring or radial routes or bypasses that have become partially built up, with little or no roadside development.

If there is poor compliance within a speed limit on a road or stretch of road the reasons for non-compliance should be examined before a solution is sought. If the speed limit is set too low for no

clear reason and the risk of collisions is low, then it may be appropriate to increase the limit.

The existing 30mph limit along the A606 for Langham on the approach from Melton has been positioned in a suitable location. It is set 100m from the first property in Langham, 250m away from the main built up area and just west of the junction with Whissendine Road. It would not be appropriate to position the 30mph limit further out of the village, as there is no change in landscaping and in open countryside.

Within the circular it states roads suitable for a 40 mph limit are generally higher quality suburban roads or those on the outskirts of urban areas where there is little development. Usually, the movement of motor vehicles is the primary function. A 30mph limit should only be used in built up areas with development on both sides of the road.

2 Pedestrian Crossing Assessments

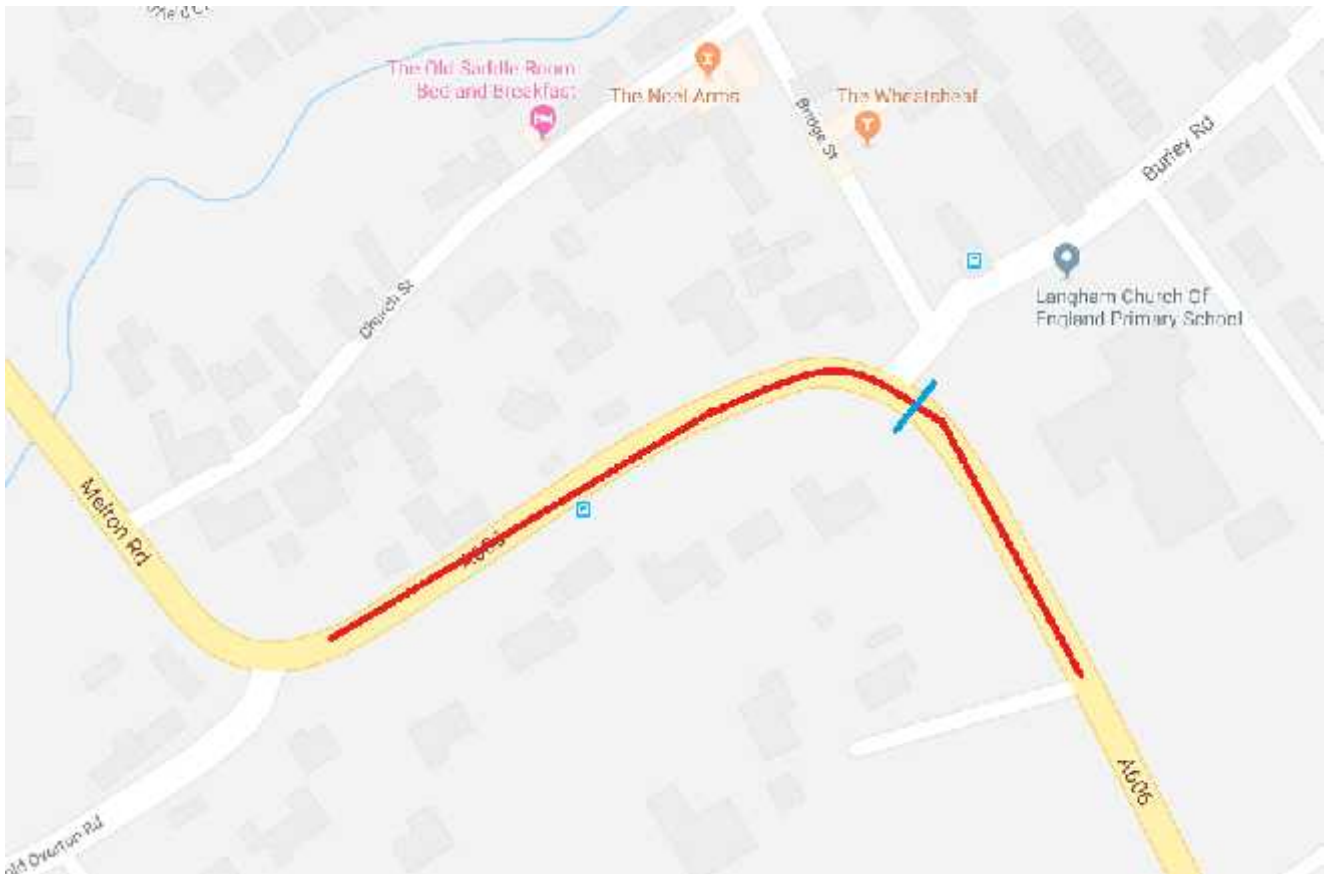
An assessment, in accordance with LTN 1/95 was carried out at 2 locations along Melton Road, Langham.

SURVEY 1

Survey 1 was carried out on the corner of Melton Road and Burley Road between 5/11/2018 and 9/11/2018.

The survey looked at the area highlighted in red on the plan below; but specifically looked at the refuge island crossing, highlighted in blue.

The surveys were carried out between 7:30am and 9:15am and 2:30am and 4pm (excluding Tuesday 6/11/2018 pm).



Date:	Total Number of pedestrians walking west to east		Total Number of pedestrians walking east to west	
	AM	PM	AM	PM
Mon 5/11/2018	23	3	9	12
Tues 6/11/2018	15	Survey not carried out	13	Survey not carried out
Wed 7/11/2018	20	5	7	10
Thurs 8/11/2018	17	0	4	9
Fri 9/11/2018	16	7	6	8

During the assessment, it was identified that the peak crossing time was between 8:30am and 9:00am. The majority of those observed were parents with children accessing Langham Church of England Primary School. The Primary School students arrive between 8:30 and 8:45 with lessons commencing at 8:45am.

The busiest day in terms of pedestrian movements was on Monday 5th November 2018. A total of 32 pedestrians (including a mobility scooter) crossed the road. The maximum wait for a pedestrian to cross the road, including waiting for traffic, was 1 minute. On Monday 5/11/2018 and Thursday 8/11/2018 a total of 8 pedestrians crossed the A606 near the bus stop on Melton Road. These pedestrians crossed unaided and without any difficulty.

On the 9/11/2018 at 8:15am, a student from Catmose College crossed the Melton Road from the north to the south side, and then crossed again using the refuge island. This student used the pedestrian desire line, rather than utilizing the safest option of the zebra crossing. This student crossed with no difficulty.

On each morning a gentleman in a mobility scooter would cross the road with his dog. The gentleman would cross to the pedestrian refuge island and then wait for a gap in the traffic on the opposite side of the road before he would cross. The majority of vehicles actually stopped to allow the gentleman to cross the road. The maximum time it took him to cross the road, including waiting for traffic was 1 minute. The gentleman's dog was elderly and walked slowly, and therefore he would wait for large gaps in the traffic before crossing.

The peak crossing time in the afternoon is between 3.30 and 4pm. The pedestrians included unaccompanied Catmose College students and primary school children with an adult. The maximum waiting time to cross was 15 seconds. A resident in a mobility scooter used the refuge island to cross; they would cross to the pedestrian refuge island to wait for a gap in traffic in the opposite direction. Vehicles coming in the opposite direction would stop to allow the resident to cross.

The survey on Friday 9/11/2018 between 3pm and 3:30pm 2 pedestrians did not cross the road using the refuge island, but crossed the road closer to Oakham to access properties adjacent to The Paddocks. They crossed without any difficulty.

The refuge island is used by the majority of pedestrians travelling west to east to cross the A606. The refuge island is 2.5m wide; this is above the requirement minimum specified in the LTN 2/95. The pedestrians observed would cross half of the road and then wait on the pedestrian refuge until they can cross the next second half of the road.

Due to its proximity to the junction of Burley Road and Church Street, young children are unable to cross the road unaided. It was observed that the parents of 2 families would walk their child to the crossing, assist them with crossing the road, and then go home. The student would then walk to the primary school/secondary school on their own.

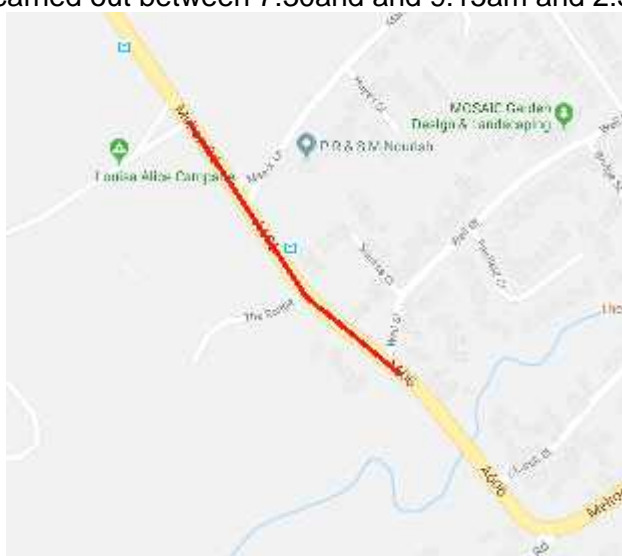
The only suitable location along this section of road for a crossing is outside the bus stops on Melton Road, as highlighted below. This location has wide footpaths on either side of the road, and scope within the adopted highway to install the required street furniture. There is adequate forward visibility for vehicles to see the approaching crossing point.



If a crossing is installed at this location, users will be required to cross the road 3 times rather than once. They will need to cross Melton Road A606 at the new controlled crossing, then Church Street and then Burley Road; rather than just the A606 at the pedestrian refuge.

SURVEY 2

Survey 2 was carried out on the corner of Melton Road A606, between The Range and Well Street, between 12/11/2018 and 16/11/2018. The survey looked at the area highlighted in red on the plan below. The surveys were carried out between 7:30am and 9:15am and 2:30am and 4pm.



Date:	Total Number of pedestrians walking west to east		Total Number of pedestrians walking east to west	
	AM	PM	AM	PM
Mon 12/11/2018	9	5	4	7
Tues 13/11/2018	9		2	
Wed 14/11/2018	8	1	4	9
Thurs 15/11/2018	5	4	2	10
Fri 16/11/2018	0	0	1	0

The majority of people crossing the A606 from west to east were dog walkers. Between 8:30am and 9am, on each day there was a parent walking with a primary school-aged child, a primary school child who only had assistance to cross the road and a Catmose College student on their own. The maximum waiting time including crossing was 40 seconds.

On Melton Road near The Range and Well Street, there are 2 main areas that residents use to cross the road. These locations offer the best visibility splays in both directions. The area shown in red on

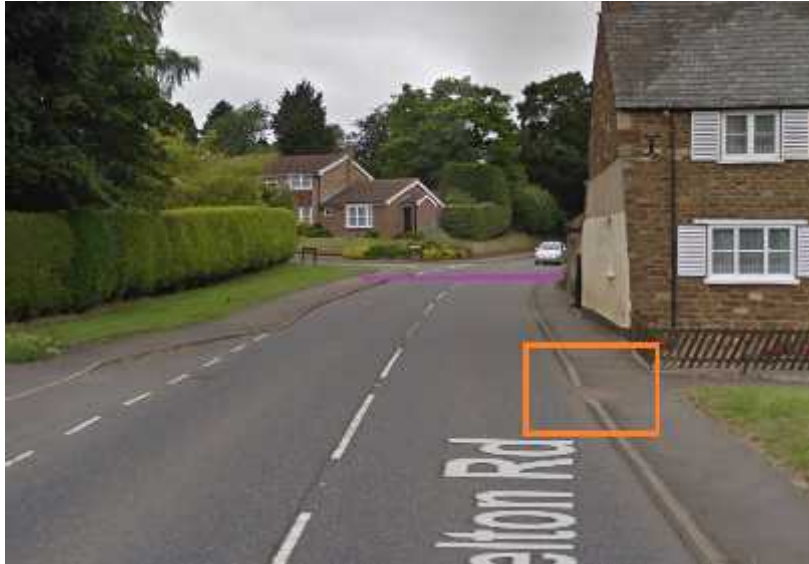
the plan below was only used by a handful of pedestrians crossing the road. These were predominantly dog walkers who saw a gap in the traffic so decided to cross. The area shown in blue on the plan below is where the majority of pedestrians crossed the road. This included primary school children with parents, dog walkers and Catmose Students. This location is on the pedestrian desire line for those coming from The Range accessing the primary/secondary school, and those walking into the village/Oakham.



Consideration was given to installing a pedestrian refuge island along this section of the A606 similar to the one adjacent to Burley Road junction. The Local Transport Note 2/95 states that the minimum standing area for the pedestrian in the carriageway must be 1.2m in width. The carriageway width at the crossing should be sufficient to prevent vehicles passing too close to the refuge or footpath. A single carriageway approach should generally have a width of no less than 3m adjacent to a refuge. If the refuge is not on a straight section of road, the width either side of the refuge may need to be greater.

The area shown in red on the plan above is not on the desire line for the majority of pedestrians crossing the road. The Local Transport Note 2/95 also requires a road to be a minimum of 8.2m wide to accommodate a refuge island. However the road width at this location is approximately 6.4m wide. Therefore this is not a suitable location for a pedestrian refuge island.

Along the east side of Melton Road there are only 2 dropped crossing, however on the west side there is only 1. The dropped crossing on both sides of the road is not at the ideal location for pedestrians to cross (shown in orange on the image below). For pedestrians walking east to west the visibility splay is blocked north by a building. Therefore pedestrians walk north of the existing dropped crossing in order to cross the road – this is shown in purple on the plan below. This location has good visibility in both directions but does not benefit from a dropped crossing.



This section of carriageway is 6.6m in width and therefore is below the required width to install a pedestrian refuge island; therefore it is not a suitable location for a pedestrian refuge island.

A site visit was carried out with a representative from Leicester City Council Traffic Management Service, on the 14/11/2018. During the site visit it was assessed as to whether a pelican crossing was needed at this locations and whether it was possible to install a crossing with the existing road layout. LTN2/95 specifies that the minimum footway width of 2m is required at pelican crossings to allow for pedestrians to wait and pass, and to accommodate the necessary crossing equipment. Between The Range and Well Street, the maximum footpath width is 1.4m. A pelican crossing pole sited by the kerb side with the standard clearance will reduce the effective footway width by around 600mm.

The most suitable location for a pelican crossing along this section of the A606 in terms of observed pedestrian movements and desire lines, would be at the existing dropped crossing on Melton Road, shown in orange on the plan above. However this is not an ideal location as the visibility splay is limited to the north. To make this location suitable a large proportion of the layby, south of The Range, would have to be removed to accommodate the pedestrian crossing footpath requirements and visibility splays. This would reduce the parking for the properties adjacent to the layby.

CONCLUSION:

It is therefore proposed not to install a refuge island or pelican crossing at this location as the infrastructure is not suitable.

The site assessments identified that difficulty level is low when crossing this section of carriage and therefore it does not warrant a formal crossing.

It is proposed to install a dropped crossing, including tactile paving, south of The Range to accommodate disabled access crossing the A606.

3 Accident Data

There have been 6 recorded accidents between 1/1/2008 and 30/9/2018:



Accident 2010/004650 – V1 was travelling south west along Burley Road and turns right to travel towards Melton and collides with a vehicle travelling south east navigating around the right bend.

Accident 201300308 – V2 and V3 (HGV) travelling south east along Melton Road, slow to stop and V1 (artic) travelling behind collides with the rear of V2 and then V2 collides into rear of V3

Accident 201301457 – V1 (on emergency call) travelling south east on Melton Road, is held up at temporary traffic lights. V4 travelling North West breaks, V2 breaks and V3 motorcycle breaks and collides with V2

Accident 201500275 – V1 reverses on car park travelling south east and collides with a pedestrian stood on the footway on Burley Road at the entrance to car park

Accident 201500987 – V2 traveling south west on Burley Road turns left to travel south east. Offside of V2 collides with V1 (motorcycle) traveling North West on Melton Road intending to turn right onto Burley Road

Accident 201600768 – V2 travelling south west on Burley Road moves off intending to turn right to continue travelling south west on Oakham Road, collides near side of V1 travelling south east negotiating the right bend.

There have been no recorded accidents involving pedestrians crossing on the A606 through Langham.

4 Speed Survey

SPEED SURVEY 1

This survey was carried out along Melton Road, Langham between 2/11/2018 and 9/11/2018.

The survey was located at the bus stop along the A606.

The approaching data is vehicles travelling north towards Melton.
The overall average speed was 26mph and the overall average 85th percentile was 29mph.



Average Speed	(Overall 26mph)		
	Bidirectional	Approaching	Receding
02/11/2018	25	27	24
03/11/2018	26	27	25
04/11/2018	26	27	25
05/11/2018	25	27	24
06/11/2018	25	27	24
07/11/2018	25	27	24
08/11/2018	26	27	24
09/11/2018	26	27	24

85th Percentile	Overall 29mph		
	Bidirectional	Approaching	Receding
02/11/2018	29	30	27
03/11/2018	30	31	28
04/11/2018	30	31	27
05/11/2018	29	31	27
06/11/2018	29	30	27
07/11/2018	29	30	27
08/11/2018	29	31	27
09/11/2018	30	31	27

Total Vehicle Numbers			
	Bidirectional	Approaching	Receding
02/11/2018	8979	4765	4214
03/11/2018	10185	5106	5079
04/11/2018	8395	4194	4201
05/11/2018	11418	5623	5795
06/11/2018	12090	6044	6046
07/11/2018	11739	5892	5847
08/11/2018	12144	6128	6016
09/11/2018	3813	1662	2151

There were 78,763 vehicles recorded along Melton Road between 2/11/2018 and 9/11/2018.

39,414 of these vehicles were travelling north towards Melton and 39,349 were travelling south towards Oakham.

There was an average of 9,845 vehicles per day; 90% of these vehicles were cars, 4% were vans/small lorries/vehicles with trailers and 3% were HGV's.

From the LTN1/95 assessment it was identified that the peak pedestrian crossing time was between 8:30 and 9am. The total vehicle movement in both direction between this times were:

Date	Vehicle Count
05/11/2018	525
06/11/2018	523
07/11/2018	519
08/11/2018	590
09/11/2018	518

SPEED SURVEY 2

This survey was carried out on Melton Road, Langham, between 13/11/2018 and 18/11/2018.

This survey was located between The Range and Well Street.

The approaching traffic is vehicles travelling north towards Melton Mowbray.

The overall average speed was 27mph and the 85th Percentile was 31mph.



	Average Speed (mph)		
	Bidirectional	Approaching	Receding
13/11/2018	27	28	26
14/11/2018	27	28	25
15/11/2018	27	28	26
16/11/2018	27	28	26
17/11/2018	27	29	26
18/11/2018	27	29	26

	Average 85th Percentile		
	Bidirectional	Approaching	Receding
13/11/2018	31	32	29
14/11/2018	31	32	29
15/11/2018	31	33	29
16/11/2018	30	32	29
17/11/2018	32	34	29
18/11/2018	31	33	29

	Total Vehicle Numbers		
	Bidirectional	Approaching	Receding
13/11/2018	4062	2199	1863
14/11/2018	9831	4904	4927
15/11/2018	9776	4870	4906
16/11/2018	10091	5085	5006
17/11/2018	8042	4002	4040
18/11/2018	6106	2961	3145

The recorded average speeds are all below 30mph.

The 85th percentile vehicle speeds heading into the village (receding data) are below 30mph, however the speeds of vehicles existing the village are just above 30mph.

Over this 6 day period there was a total of 47,908 vehicles.

There was an average of 7,984 vehicles per day. 91% of these vehicles were cars, 2% were vans/small lorries/vehicles with trailers and 3% were HGV's.

5 Options

1. **As a one-off measure and no future maintenance responsibility - cut back all vegetation adjacent to footpaths along A606 Melton Road**

Costs Approximately £500

Cut back vegetation adjacent to footpaths as a one off measure for safety. In various locations along Melton Road, Langham, vegetation is overhangs the footpaths. This has led to footpaths becoming narrow in places. A letter will be sent to the residents with vegetation overhanging the footpath, stating what works we will be carrying out and also advising them of their responsibilities regarding vegetation maintenance.

2. **Lining and high friction surfacing throughout the village needs to be renewed, as it has become faded. Improve existing SLOW marking with red high friction surfacing.**

Costs Approximately £3,000

Improve the existing white lining and red high friction surfacing along the A606, including high friction surfacing with SLOW marking. As illustrated below:



3. Create a 250m 40mph buffer zone before the existing 30mph at the north end of the village along the A606

Costs Approximately £5,000

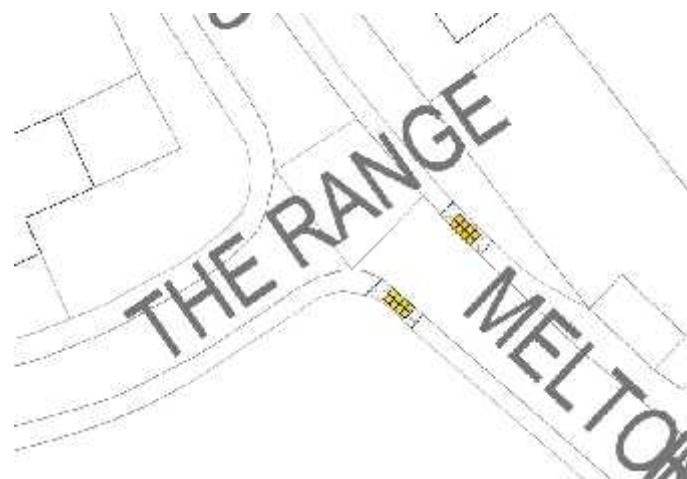
Relocate the 30mph just before the first dwelling on the A606 and create a 40mph buffer zone from the existing 30mph, including Whissendine Road. This speed limit will be more self-enforcing and allows vehicles to alter their speed gradually.



4. Dropped Crossing on A606 south of The Range

Costs Approximately £1500

Installation of a dropped crossing including tactile paving, south of The Range junction with Melton Road. There is currently no formal pedestrian dropped crossings along this section.



5. Controlled Crossing

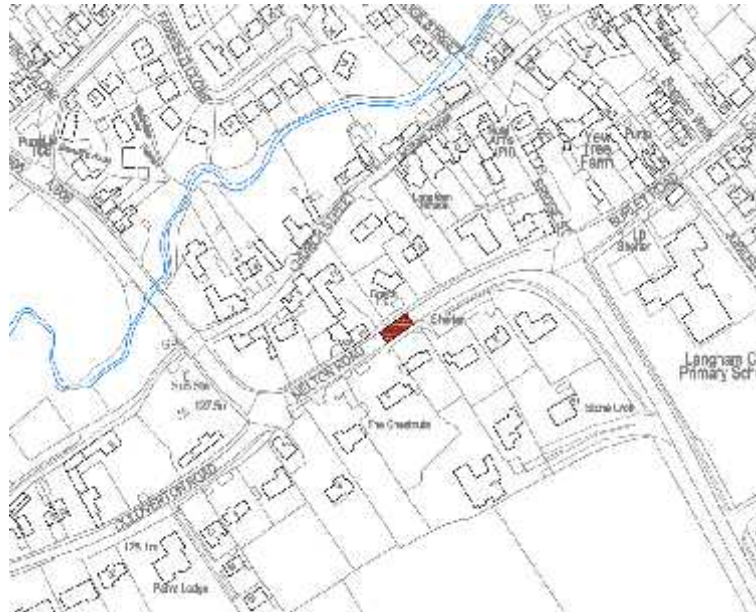
Cost Approximately £50,000

Installation of a controlled crossing.

There is only 1 suitable location for a controlled crossing on the A606. This has been illustrated below.

If this is to be implemented for residents accessing the primary school or walking towards Oakham, the residents will have to cross at the pelican crossing, then cross Bridge Street and then Burley Road. This is not on the desire line for the majority of residents.

A controlled crossing requires a pedestrian to press the button. The controlled crossing is fitted with either sensors in the ground or camera, which will detect traffic and change its lights accordingly, once the button has been pressed. Pedestrians can wait up to 2 minutes for the lights to change before they can cross the road. The maximum waiting time, including crossing the road for the pedestrian refuge island was 1 minute.



6 Recommendation

The following improvements are recommended within Langham

-) Option 1 – Cut vegetation back along footpaths boarding A606 through Langham
-) Option 2 – Improve white lines and high friction surfacing through Langham
-) Option 4 Installation of a dropped crossing including tactile paving, south of The Range junction with Melton Road. There is currently no formal pedestrian dropped crossings along this section.

Overall Costs for Recommended Schemes

Option 1	£500
Option 2	£3,000
Option 4	£1,500
Total Cost	£5,000

Further measures to be considered after an observation period

-) Option 3 – create a 40mph buffer zone north of Langham

Appendix A – I95 Assessment

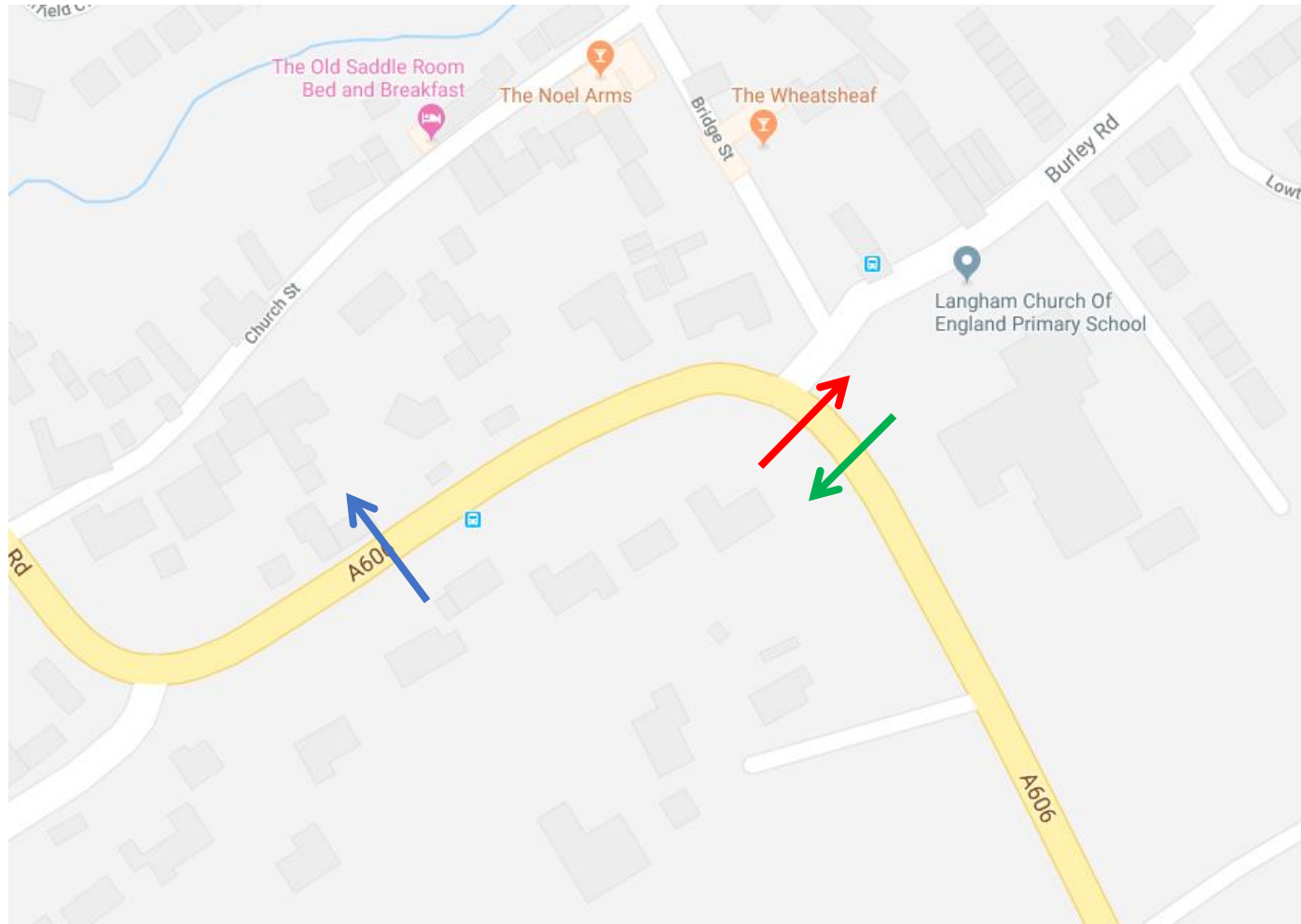
Appendix A

LTN/1/95 Assessment

Site Characteristics		
Site location	Burley Road junction with A606	Melton Road/A606 Opposite Well Street
Carriageway Type	Two way single	Two way single
Carriageway Width		
Footway width		
Direction 1	2	1.2
Direction 2	2m (possibility to extend footpath on south side of A606 within highway boundary)	1.1
Refuge Island Y/N	Yes	No
Road lighting Standard Y/N	No	No
Bs5489 Classification		
Is Lighting above standard	No	No
Any rearrangement necessary	No	No
Better lighting standard needed	Yes	Yes
Supplementary lighting needed	Yes	yes
Minimum Pedestrian to Vehicle Visibility		
Direction 1 (west to east)	100m+	100m
Direction 2 (east to west)	70m	30m
Minimum Vehicle to Crossing Visibility		
Direction 1 (west to east)	100m+	100m
Direction 2 (east to west)	70m	30m
Waiting/Loading/Stopping Restrictions		
At prospective site	No	No
Within 50m of the site	No	No
Public Transport Stopping points Y/N		
At Prospective site	Yes	No
Within 50m of the site	Yes	No
Relationship to crossing (in direction of travel)	2 bus stops on Burley road. 2 stops on A606 110m away	
Direction 1 App/Exit		
Direction 2 App/Exit		
Distance to nearest significant traffic junctions		
Direction 1 (west to east)	5m	N/a
Direction 2 (east to west)	700m	178
Other Pedestrian Crossings		
Direction 1 (west to east)	No	No
Type		
Direction 2 (east to west)	No	No
Type		
Skid Risk - surface meet skid resistance requirements? Y/N	N/a	N/a
Surroundings within 100m (Y/N)		
Hospital/Sheltered housing for disabled people	No	No
School	Yes	No
Post office	No	No
Railway/Bus Station	No	No
Pedestrian leisure/shopping area	No	No
Sports Stadia/entertainment venue	No	No
Junction with cycle route	Yes	No
Equestrian Centre or junction with bridle path other (e.g. fire station)	No	No
Crossing Traffic Information		
Flow and Compositions		
Pedestrian Count (per hour)	10	7
Prams/Pushchairs (%)	0%	0%
Elderly (%)	1%	2%
Unaccompanied young children (%)	1%	1%
Severe mobility difficulties	0%	0%
Visually impaired	0%	0%
Crossing cyclists	2%	1%
Equestrian	0%	0%
other		
Time to cross the road		
Able pedestrians	20 to 40 seconds	0 to 40 seconds
Elderly or disabled people	1 Minute	40 seconds
Difficult of crossing		
Able Pedestrians	Not difficult	Not difficult
Elderly or disabled people	Minimal Difficulty - did not use footpath with mobility scooter. Stuck to carriageway	Minimal difficulty - crossed at location without dropped kerb
Latent Crossing Demand Estimate		
Vehicle Traffic Information		
Vehicle count per day	9,845.37	
cyclists	5%	
heavy goods vehicles		
public service vehicles	2 Hourly	
Vehicle Speed		
Road Accidents	26mph Average Speed	
Mean personal Injury Accident Frequency	6 in 1- years	1 in last 10 years
Number per year at site (5 years)		1 N/a last accident was 2013
Number per year at an average local site (per 5 years)	1	0

Survey 5/11/2018 to 9/11/2018 Survey between Burley Road and Cold Overton Road

Monday 5/11/2018 7:30am until 9:30am



Notes:

7:25am Bus pick up outside school

1 mobility scooter with dog – including waiting for traffic to clear took 25 seconds to cross

1 parent helped child cross the road and then went home

8.17am bus turned right down Burley road and stopped outside school for college students pick up

Burley Road Zebra crossing is well used between 8.20am and 8.50am

Maximum wait for gap in traffic 1 minute

School bus drop off is 8.33am. The bus stops on the south side of Burley Road. A school assistant assists the children getting off the bus and to the school gates

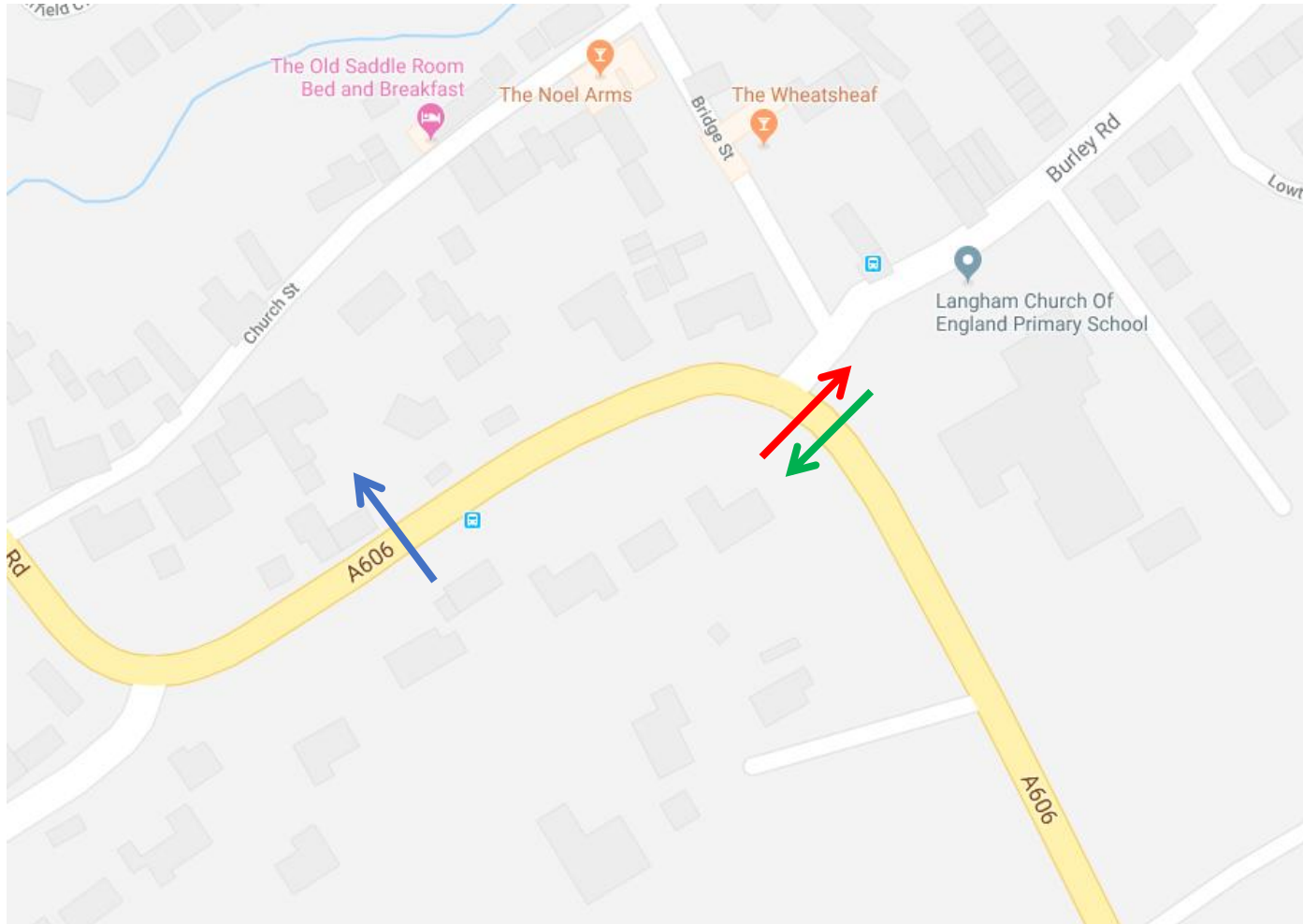
Bus pick up 8.42 outside school

School opens at 8.45am and closes at 3.25pm

Service bus 8.59am

Time	Blue Arrow	Red Arrow	Green Arrow
7:30 to 8:00am		2 Pedestrians 1 Bike	1 Pedestrian 1 Bike
8:00 to 8:30am		5 Pedestrians	2 Pedestrians
8:30 to 9:00am	4 Pedestrians	11 Pedestrians	4 Pedestrians
9:00 to 9:30am			1 Pedestrian

Monday 5/11/2018 2:30pm to

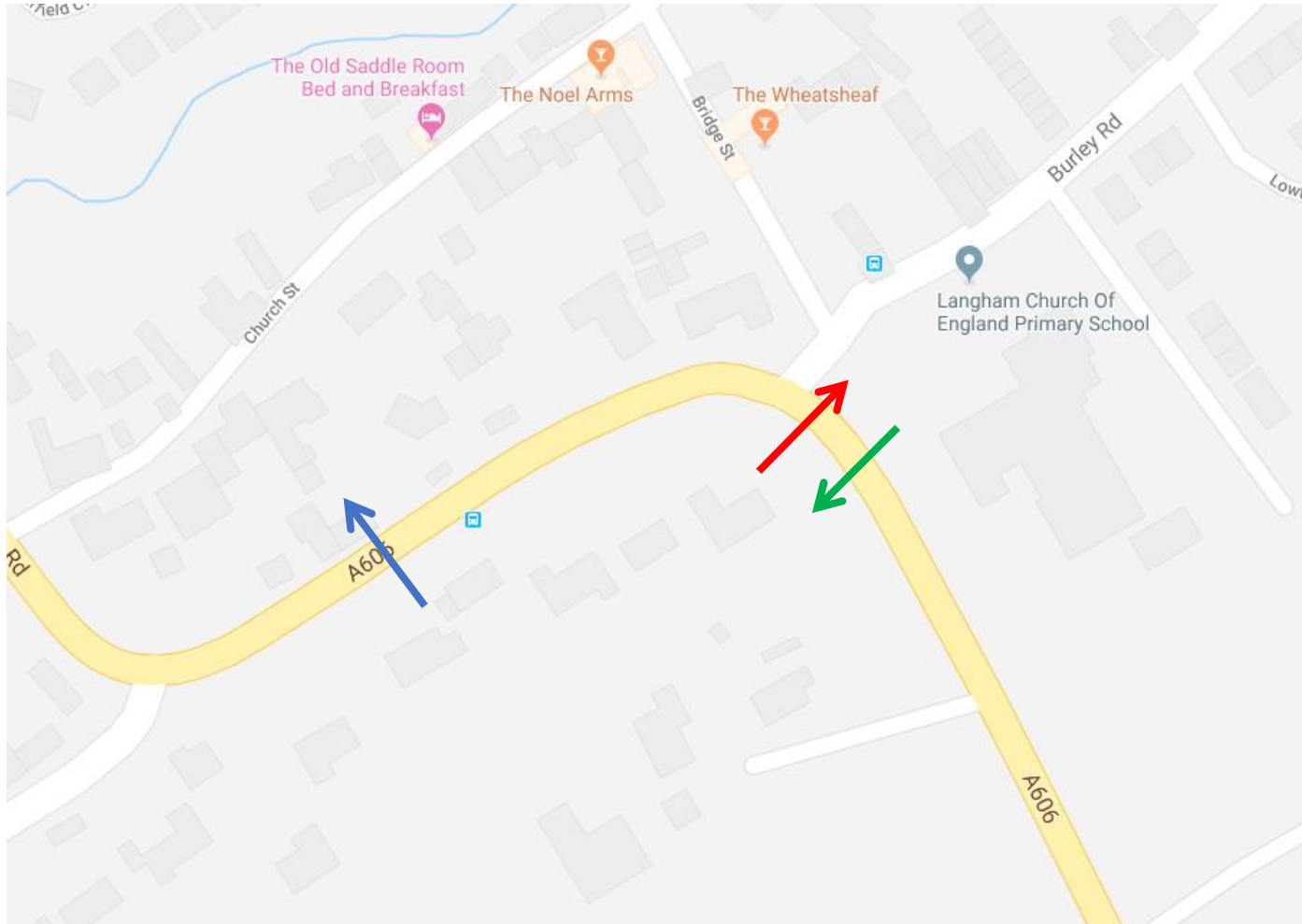


Notes:

Maximum wait from 3:30pm to 4pm was 32 seconds

Time	Blue Arrow	Red Arrow	Green Arrow
2:30 to 3pm			
3pm to 3:30pm			
3:30pm to 4pm			10 pedestrians
4pm to 4:45pm	3 pedestrians		2 pedestrians

Tuesday 6/11/2018 7:30am until 9:30am

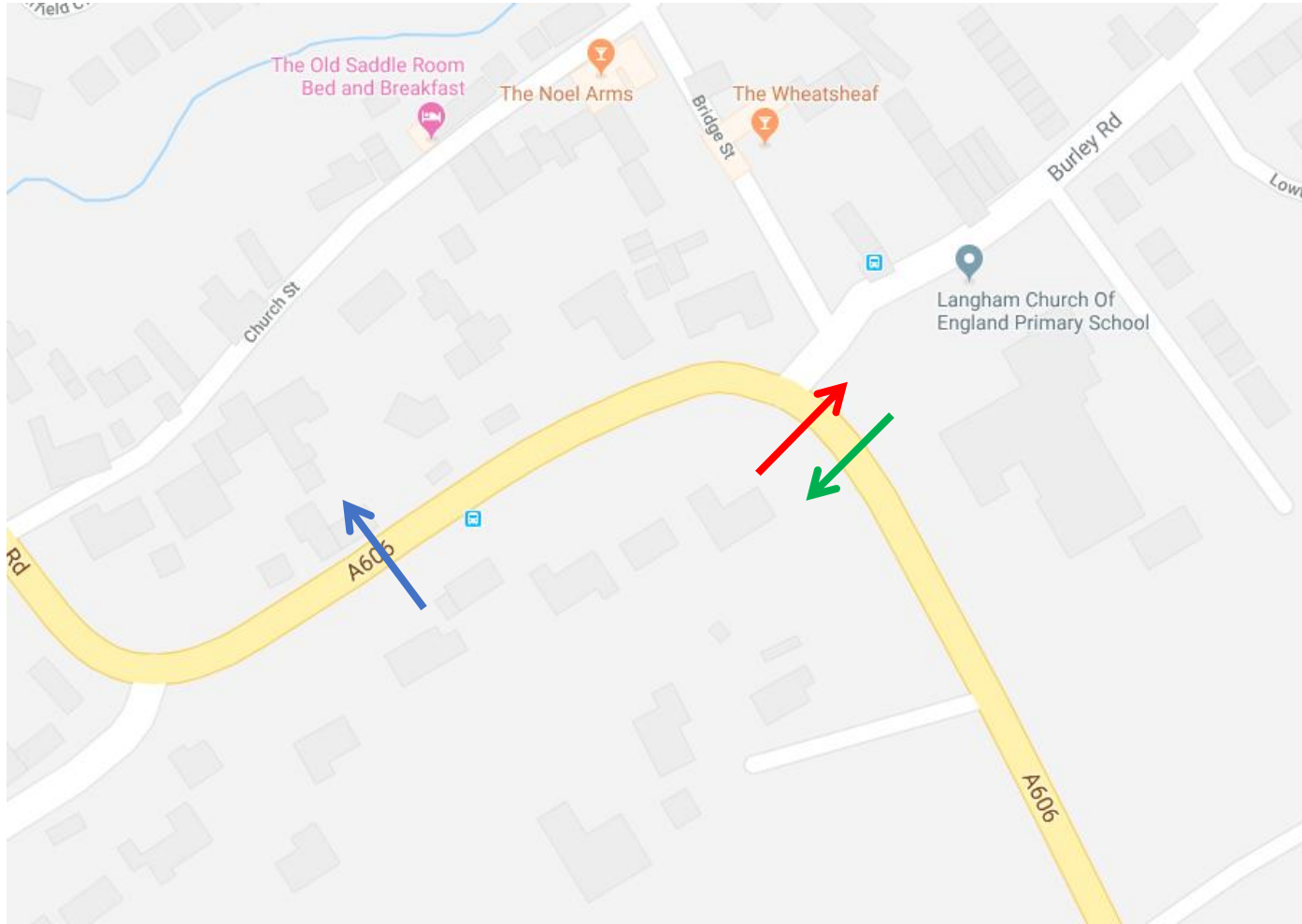


Notes:

- 7:40 School bus pick up Melton Road
- 7:56 Service bus pick up Burley Road
- 8:12 Service bus pick up Burley Road
- 8:34 Primary school bus drop off
- 8:40 Primary school bus drop off

Time	Blue Arrow	Red Arrow	Green Arrow
7:30 to 8:00am			2 Pedestrians 1 Mobility Scooter
8:00 to 8:30am			3 Pedestrians
8:30 to 9:00am		15 Pedestrians	6 Pedestrians
9:00 to 9:30am			1 Pedestrian

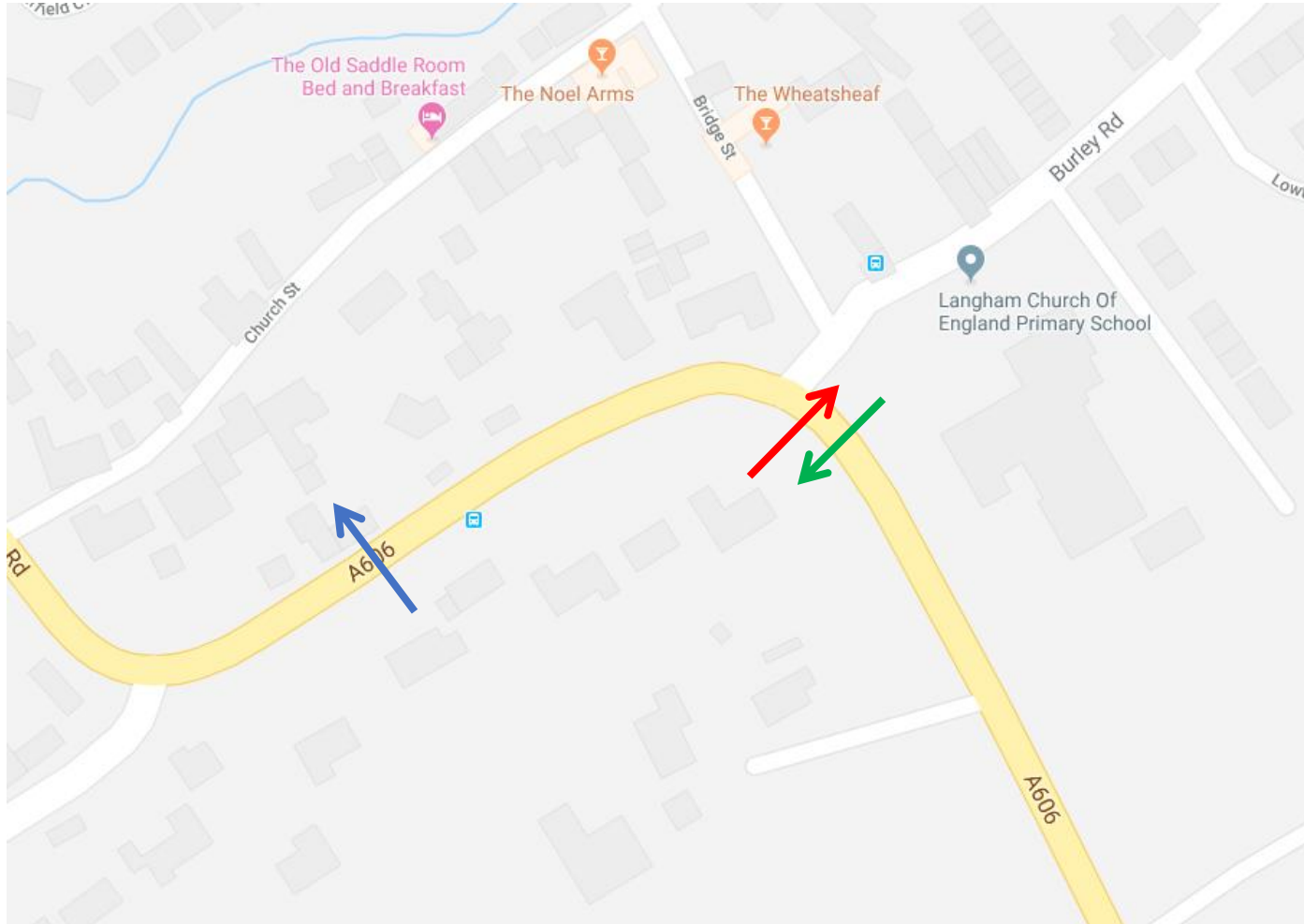
Wednesday 7/11/2018 7:30am to 9:30am



Notes:
 7.40 School bus Melton Road
 7.58 Service bus Burley Road
 8.14 College Bus
 8.33 Primary school bus Burley Road
 8.43 School bus Burley Road
 Short breaks in the traffic between 8.20 and 8.30 but steady flow before and after

Time	Blue Arrow	Red Arrow	Green Arrow
7:30 to 8:00am		2 pedestrians 1 wheelchair	
8:00 to 8:30am			1 pedestrians
8:30 to 9:00am	2 pedestrians	15 pedestrians	5 pedestrians
9:00 to 9:30am			1 pedestrians

Wednesday 7/11/2018 2:30pm until 4pm

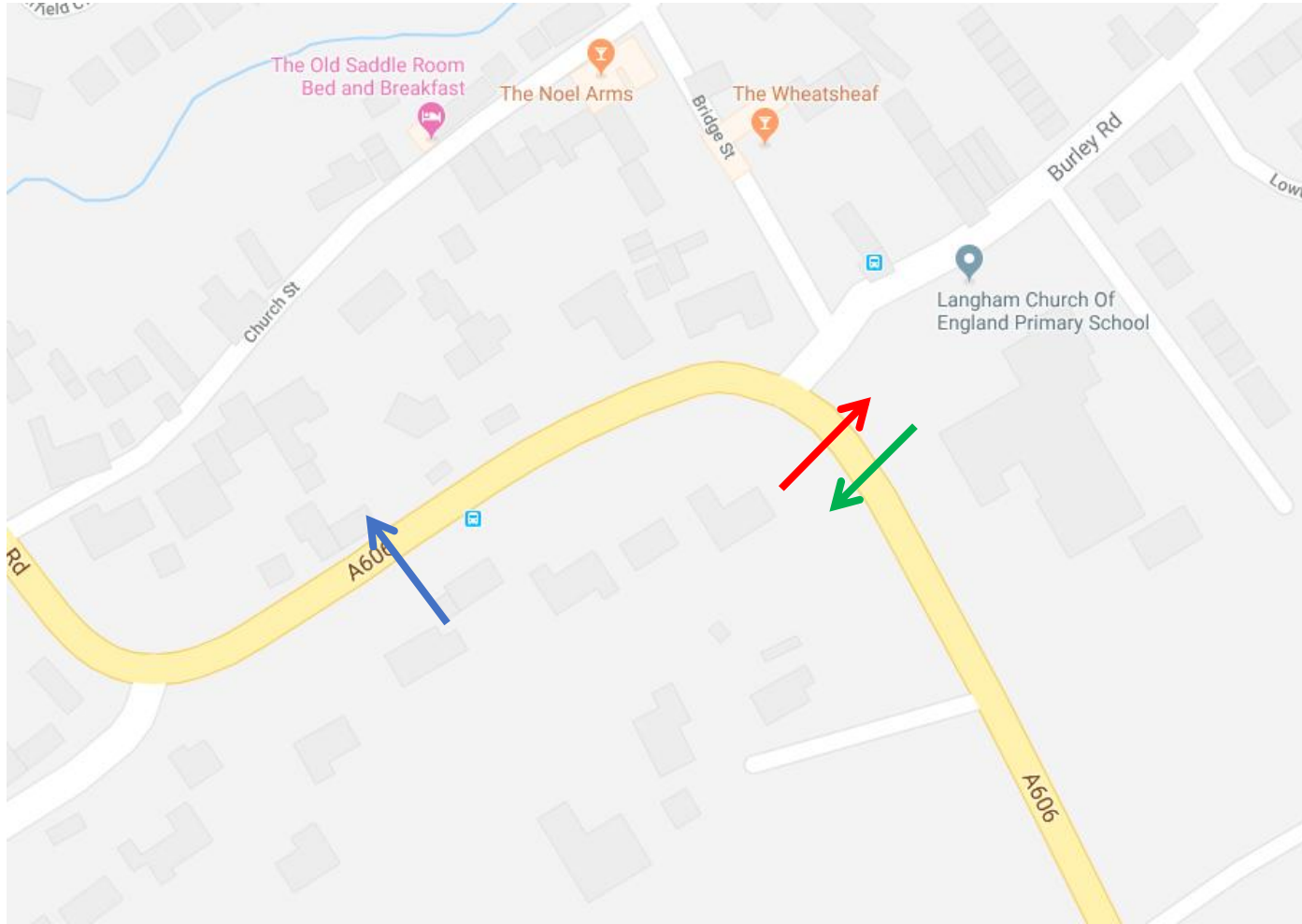


Notes:

- Between 2:30 and 3pm 1 pedestrian crossed further down the A606 towards Oakham. Minimal waiting for other pedestrians
- Between 3 and 3:30pm a vehicle stopped to allow the mobility scooter to cross.
- School bus arrived at 3:15pm
- School bus left at 3:40pm
- Maximum waiting time was 15 seconds

Time	Blue Arrow	Red Arrow	Green Arrow
2:30 to 3pm	1 pedestrian with a dog	1 mobility scooter and dog	2 students
3 to 3:30pm		3 pedestrians	1 mobility scooter and dog
3:30pm to 4			7 pedestrians

Thursday 8/11/2018 7:30am to 9:30am

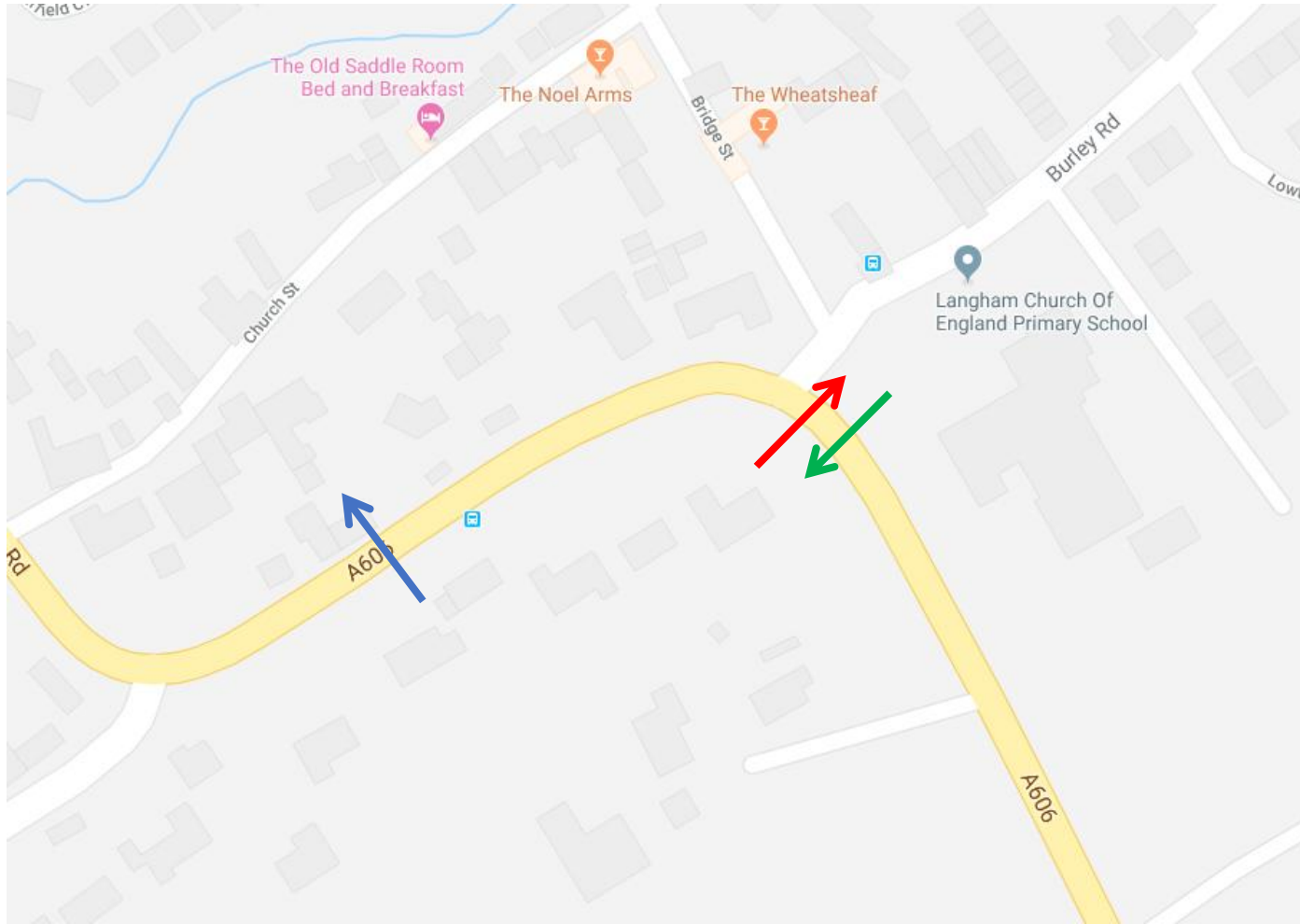


Notes:
 7.39 College bus
 7.54 Service bus
 8.15 Service bus
 8.33 Primary School bus
 8.50 Burley Road service bus

Long breaks in traffic. Less traffic than Monday to Wednesday. Minimal to no delays for pedestrians crossing, including mobility scooter.

Time	Blue Arrow	Red Arrow	Green Arrow
7:30 to 8:00am		1 mobility scooter	1 mobility scooter
8:00 to 8:30am		1	
8:30 to 9:00am	4	10	3
9:00 to 9:30am		1	

Thursday 8/11/2018 2:30pm until 4pm

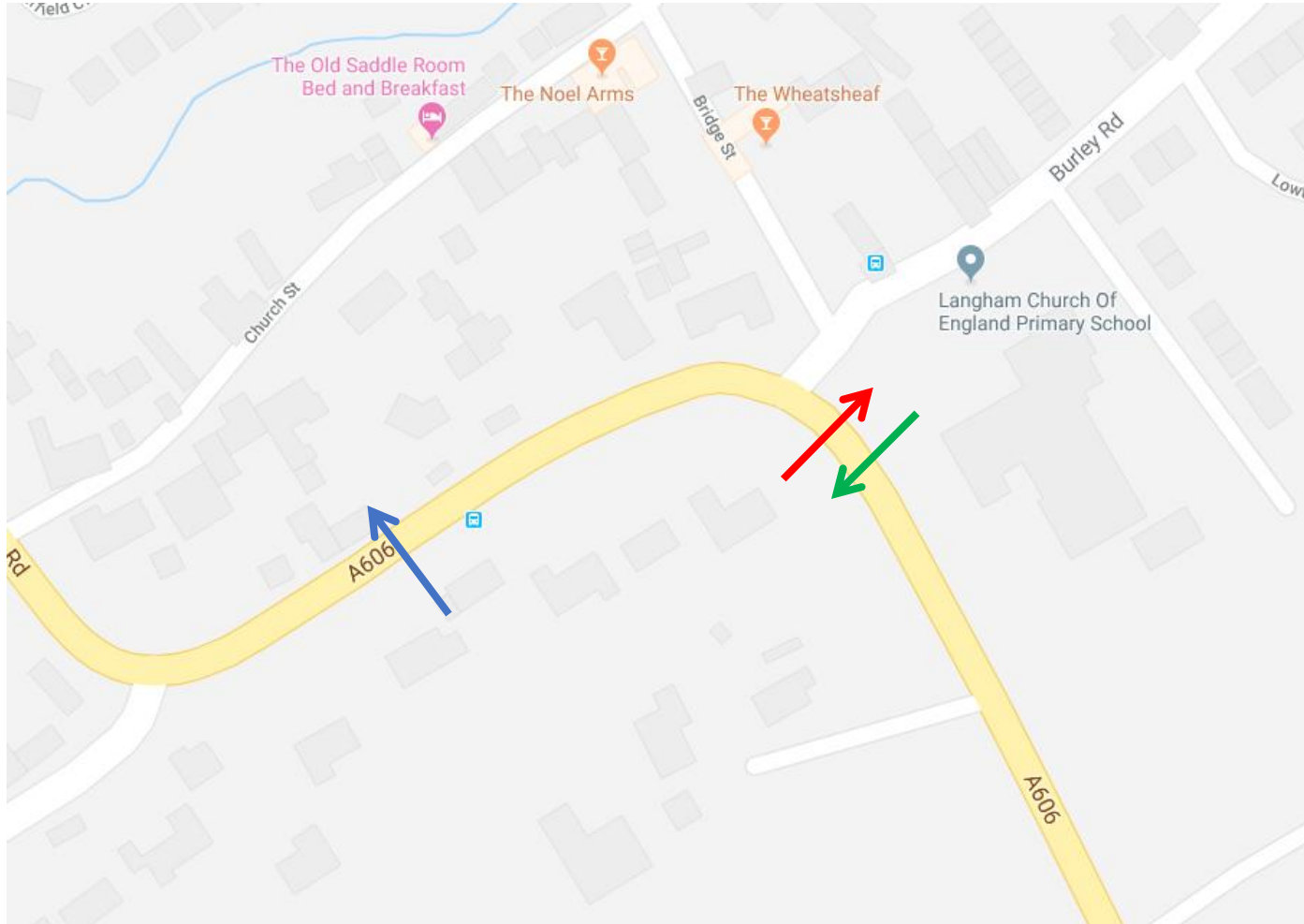


Notes:

- 14:51 RF1 arrives in village
 - 14:52 Nesbit bus arrives in village
 - 14:56 RF1 leaves village
 - 14:57 Nesbit bus arrives at school
 - 15:32 Nesbit bus leave school bus stop
- Maximum wait 13 seconds

Time	Blue Arrow	Red Arrow	Green Arrow
2:30 to 3pm			
3 to 3:30pm			8 pedestrians
3:30pm to 4			1 pedestrian

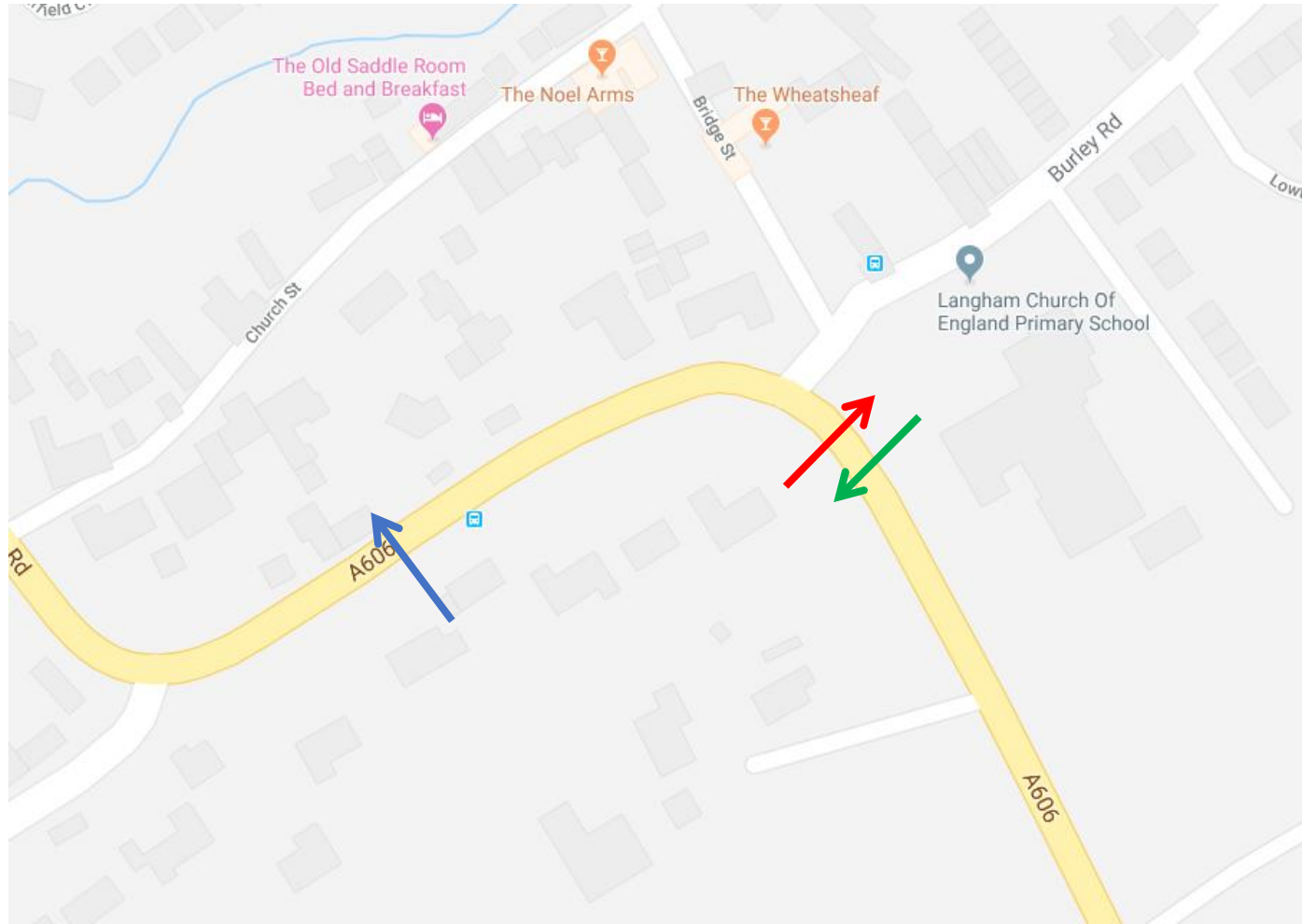
Friday 9/11/2018 7:30am to 9:30am



- Notes:
- 7:54 Service bus Burley Road
 - 8:14 Service bus Burley Road
 - 8:40 2 x primary school bus
 - 8:49 Service bus Burley Road
 - 9:15 Service bus Burley Road

Time	Blue Arrow	Red Arrow	Green Arrow
7:30 to 8:00am	1	1 mobility scooter	
8:00 to 8:30am		2 pedestrians	1 mobility scooter 1 pedestrian
8:30 to 9:00am		12 pedestrians	3 pedestrians
9:00 to 9:30am			1 pedestrian

Friday 9/11/2018 2:30pm until 4pm



Notes:

Between 2:30 and 3pm none of the pedestrians had to wait to cross the road. During this time 67 large vehicles went through

Between 3 and 3:30pm - 2 pedestrians crossed further down the A606 towards Oakham to access The Paddocks. 6 pedestrians did not have to wait to cross

School bus 3.15pm

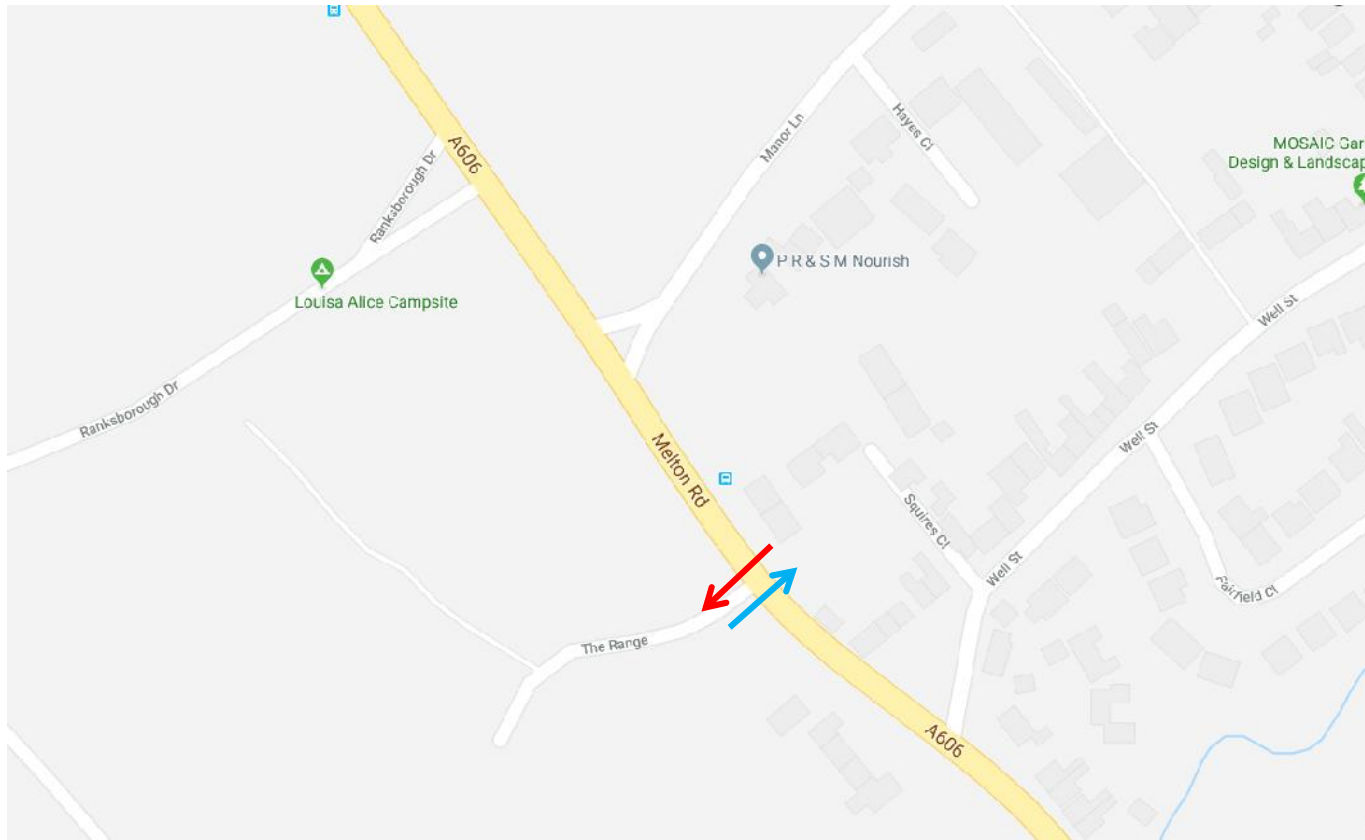
Between 3:30 and 4pm – a car stopped to let 2 pedestrians cross the road. And 2 pedestrians did not have to wait to cross.

The school bus left at 3:40pm

Time	Blue Arrow	Red Arrow	Green Arrow
2:30 to 3pm	2 Pedestrians	1 mobility scooter and dog	1 pedestrian
3 to 3:30pm		3 pedestrians	4 pedestrians
3:30pm to 4		1 Pedestrians	3 pedestrians

Survey 12/11/2018 to 16/11/2018 Survey between Well Street and Ranksborough Drive

Monday 12/11/2018 7:30am until 9:15am



Notes:

Those crossing at the east to west, walk along the A606 until they have the best visibility splay; which is just north of The Range

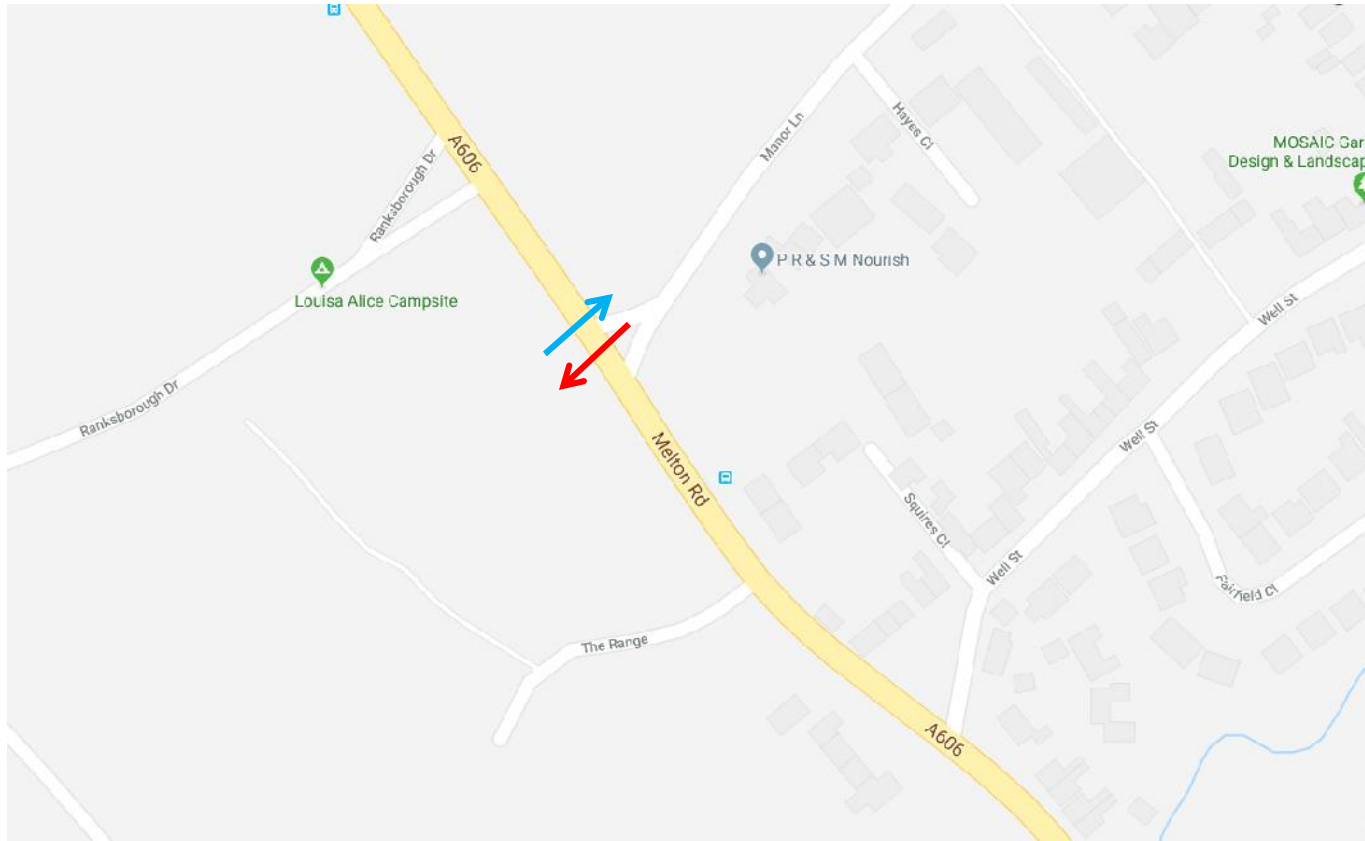
No lighting along A606 where people cross

There are no dropped crossing points along footpath where there is good visibility in both direction. Residents therefore do not used drop crossings to cross.

Longest wait for traffic and crossing time = 40 seconds

Time	Blue Arrow	Red Arrow
7:30 to 8:00am	5 pedestrians	1 pedestrians
8:00 to 8:30am	1 pedestrians	1 pedestrians
8:30 to 9:00am	3 pedestrians	2 pedestrians
9:00 to 9:15am		

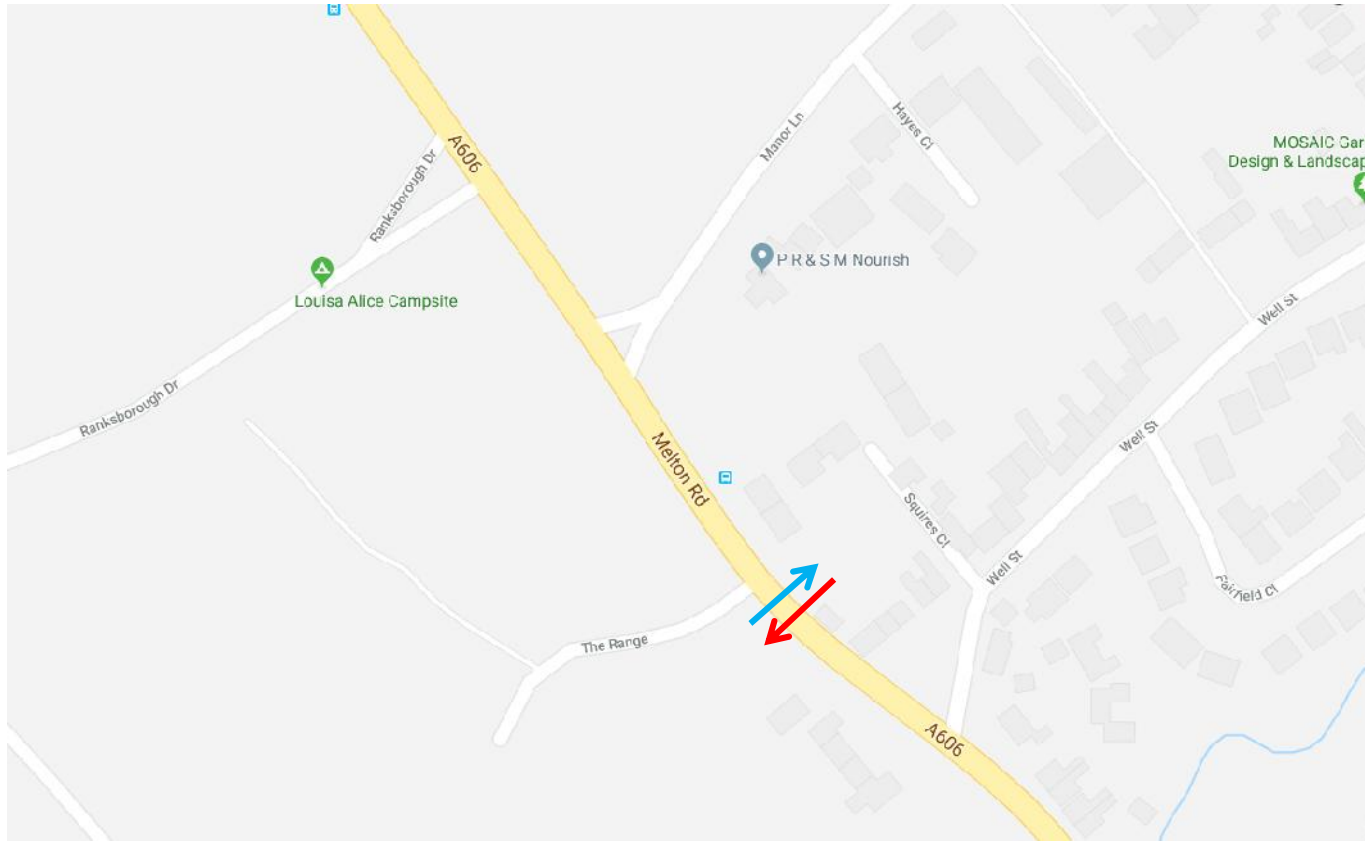
Monday 12/11/2018 2:30 to 4pm



Notes:
 Maximum delay including crossing the road was 3minutes between 3:30 and 4pm
 Pedestrians Monday all pedestrians crossed just south of Manor Lane – apart from 1 pedestrian and 1 child with a bike at 3:30 to 4pm (who crossed at The Range).

Time	Blue Arrow	Red Arrow
2:00 to 2:30pm		
2:30 to 3pm	2 pedestrians	3 pedestrians
3:00 to 3:30pm	2 pedestrians	3 pedestrians
3:30 to 4pm	1 pedestrian	1 pedestrian and 1 child with bike

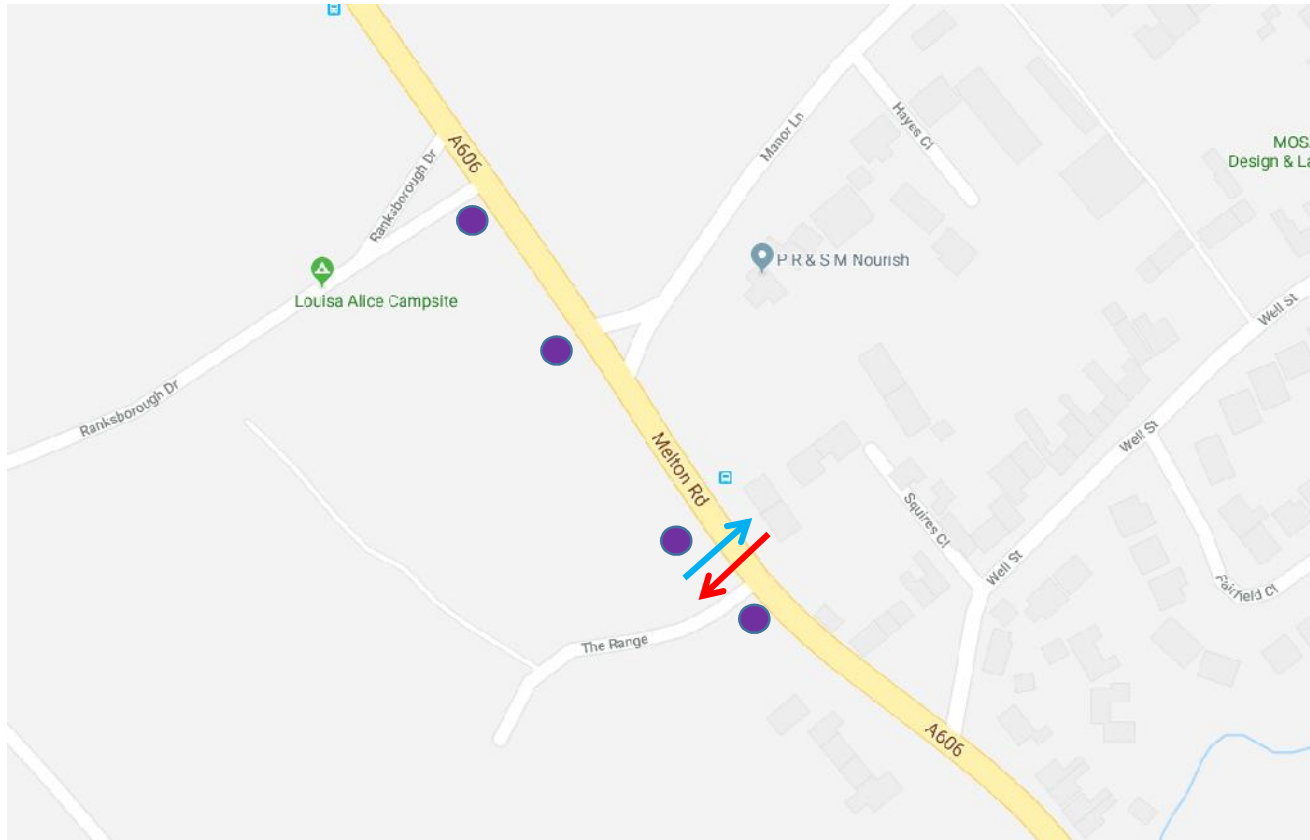
Tuesday 13/11/2016 7:30am until 9:15am



Notes:
 Pedestrians walking west to east would cross at various locations along Melton Road. However when crossing east to west pedestrians would generally cross just north of The Range – this is the point of the road where there is the best visibility.

Time	Blue Arrow	Red Arrow
7:30 to 8:00am	1 pedestrians	
8:00 to 8:30am	5 pedestrians	1 pedestrians
8:30 to 9:00am	3 pedestrians	1 pedestrians
9:00 to 9:15am		

Wednesday 14/11/2018 7:30am until 9:15am



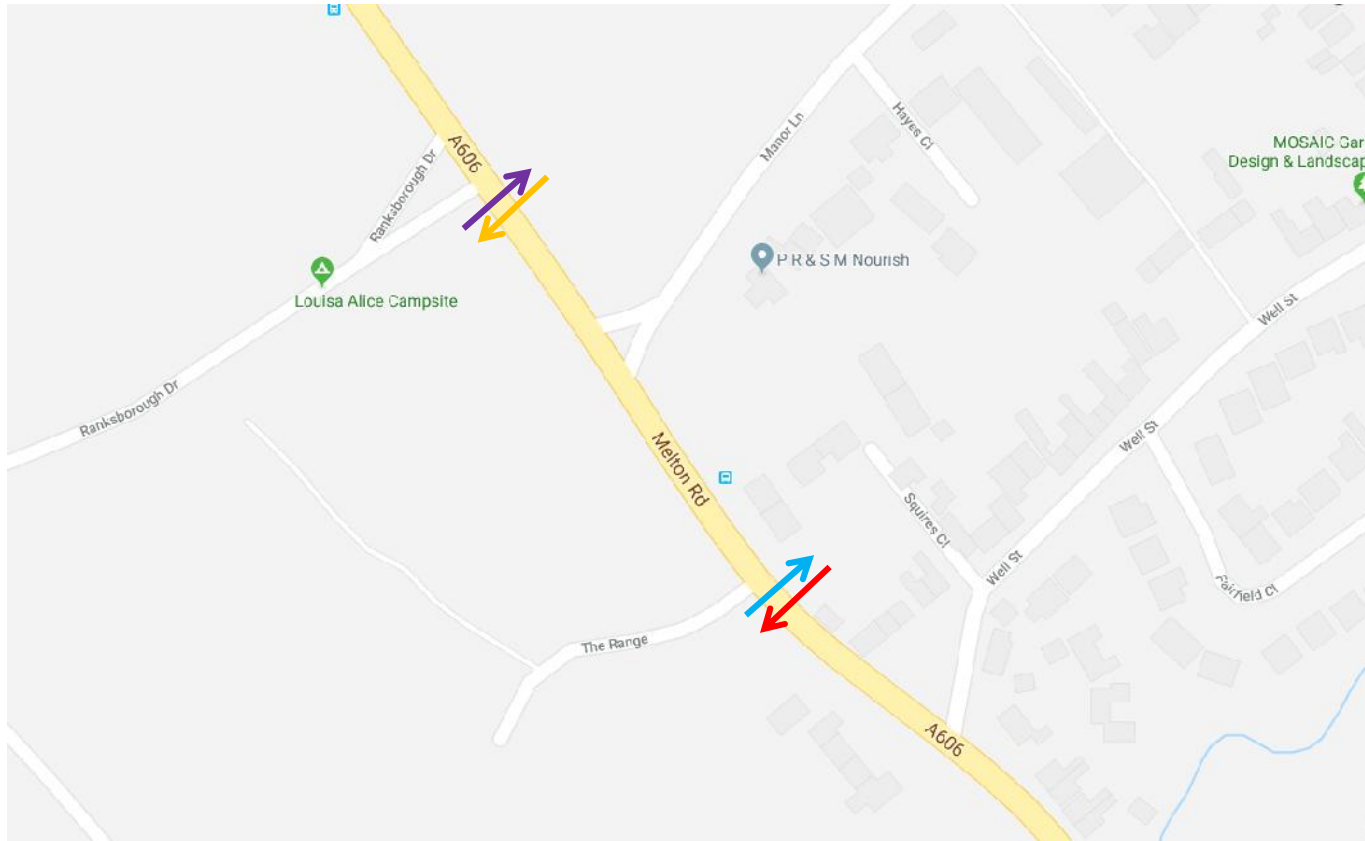
Notes:

Longer gaps in traffic compared to Tuesday and Wednesday

Residents crossed at various locations along the road as there were longer breaks in the traffic – locations marked in purple on the adjacent map

Time	Blue Arrow	Red Arrow
7:30 to 8:00am	2 pedestrians	
8:00 to 8:30am	4 pedestrians	3 pedestrians
8:30 to 9:00am	2 pedestrians	
9:00 to 9:15am		1 pedestrians

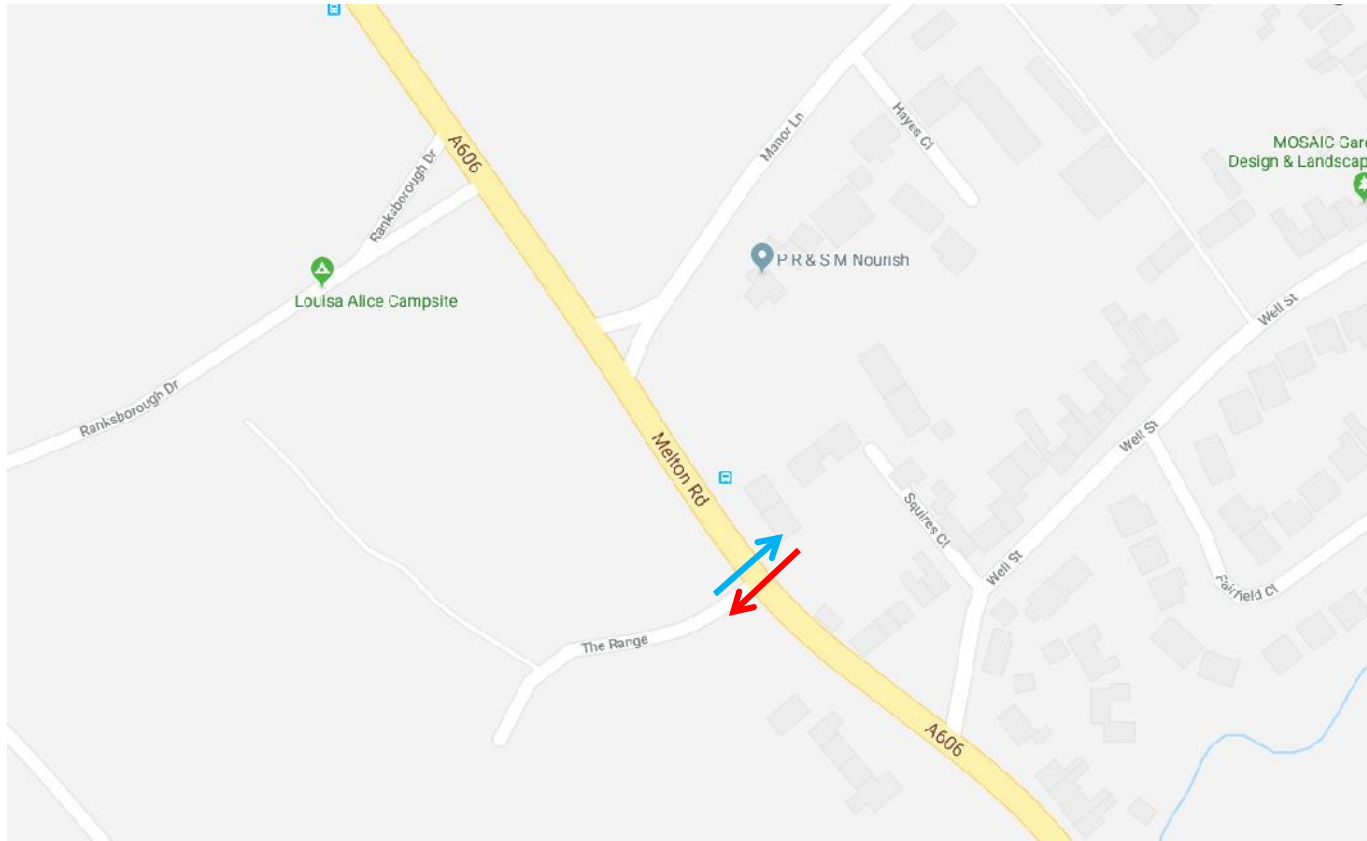
Wednesday 14/11/2018 2:30 to 4pm



Notes:
 The 5 pedestrians at the red arrow included 2 primary school children and 1 secondary school child with a bike

Time	Purple Arrow	Orange Arrow	Red Arrow	Blue Arrow
2:00 to 2:30pm				
2:30 to 3pm	1 pedestrians	2 pedestrians		
3:00 to 3:30pm				
3:30 to 4pm		2 pedestrians	5 pedestrians	

Thursday 15/11/2018 7:30am until 9:15am

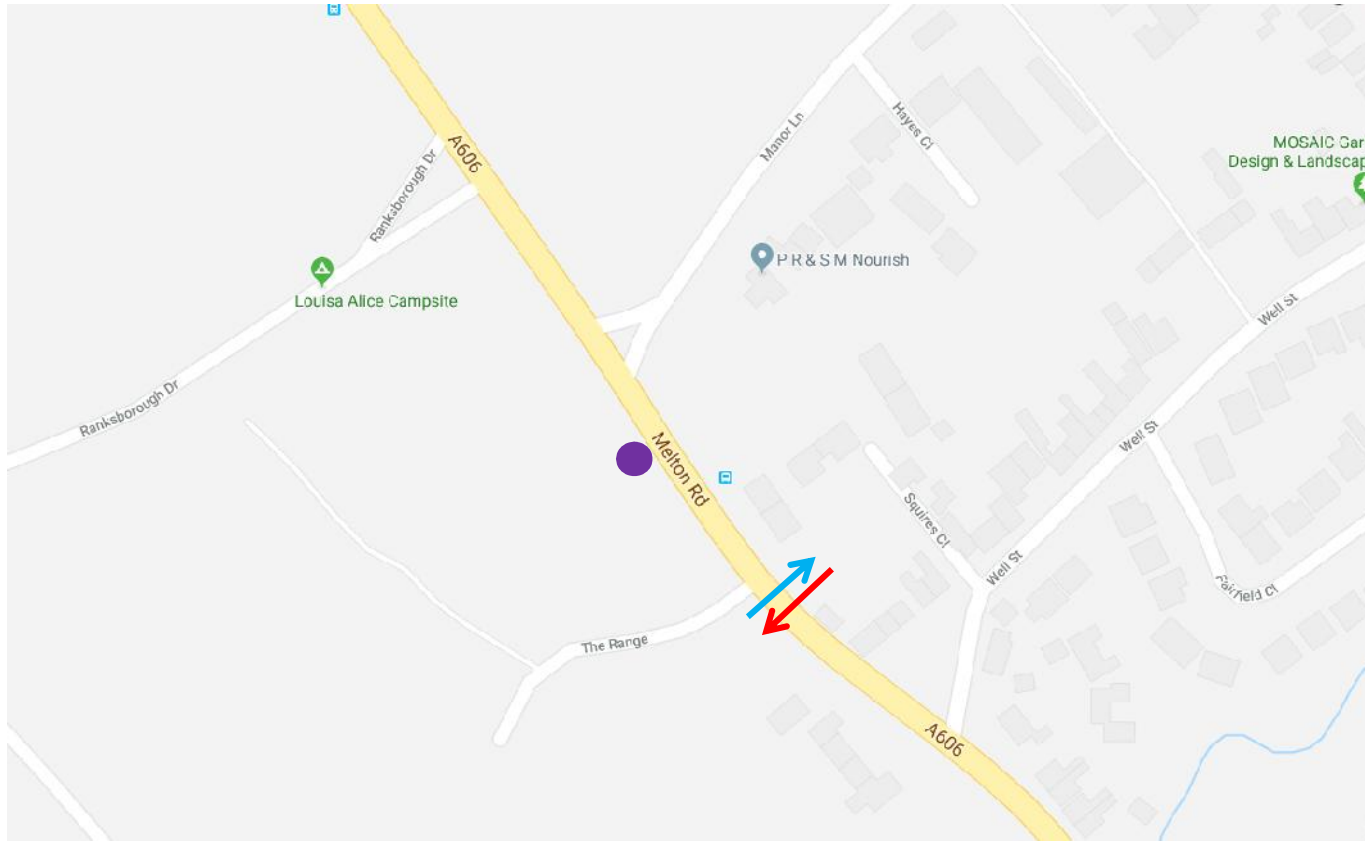


Notes:

Similar to Wednesday, there were long gaps in the traffic. Those who had to cross only had to wait for 1 or 2 vehicles to pass.

Time	Blue Arrow	Red Arrow
7:30 to 8:00am	2 pedestrians	
8:00 to 8:30am		1 pedestrians
8:30 to 9:00am	3 pedestrians	
9:00 to 9:15am		1 pedestrians

Thursday 15/11/2018 2:30 to 4pm

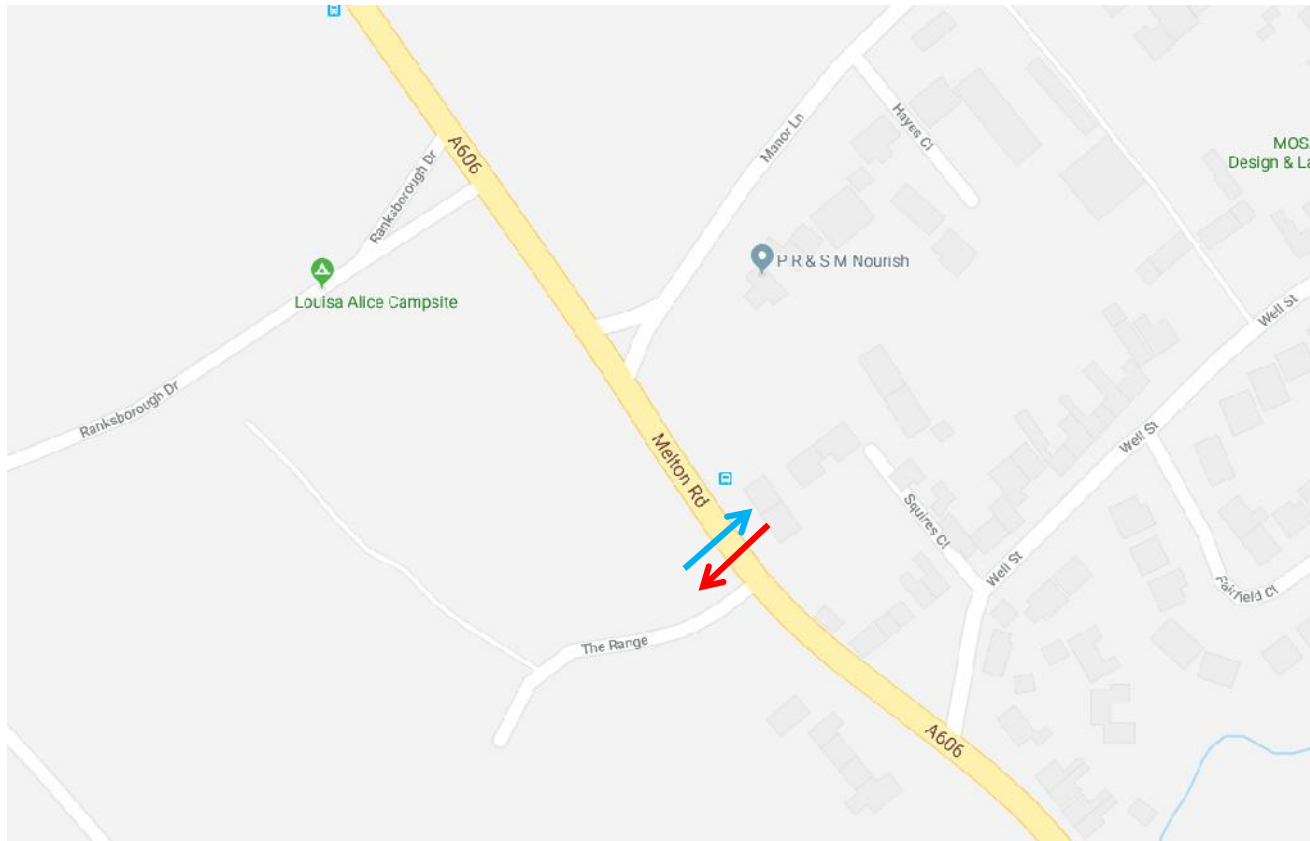


Notes:

At 2:00 to 2:30pm 2 of the pedestrian crossed between Manor Lane and The Range travelling west to east – highlighted in the purple circle

Time	Blue Arrow	Red Arrow
2:00 to 2:30pm	4 pedestrians	7 pedestrians
2:30 to 3pm		2 pedestrians
3:00 to 3:30pm		1 pedestrians
3:30 to 4pm		

Friday 16/11/2018 7:30am until 9:15am

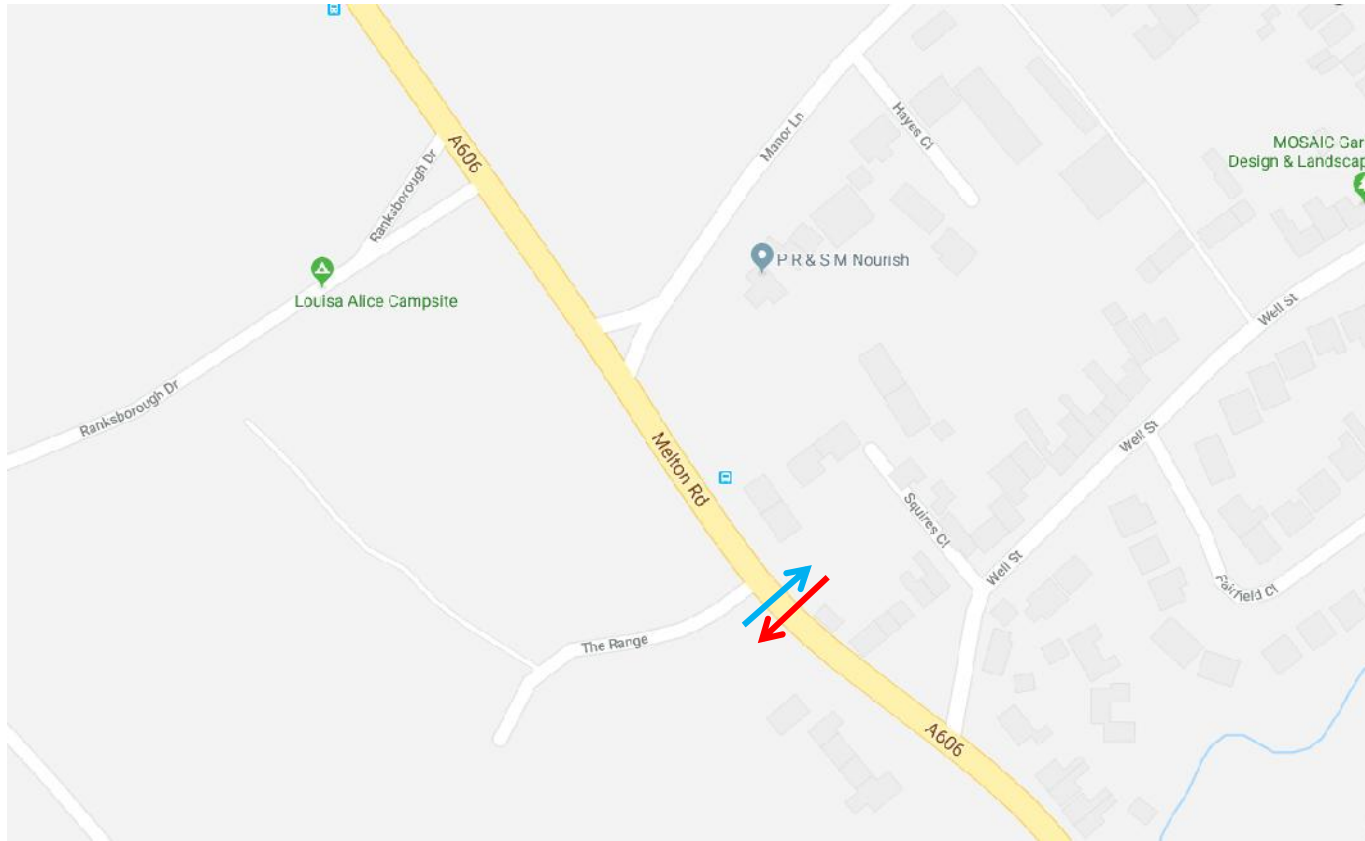


Notes:

Friday 16th November, it was very foggy. During the survey only 1 pedestrian crossed the road. On the other 4 days, 2 students crossed the road however they did not today.

Time	Blue Arrow	Red Arrow
7:30 to 8:00am		
8:00 to 8:30am		
8:30 to 9:00am		1 pedestrians
9:00 to 9:15am		

Friday 16/11/2018 2:30 to 4pm



Notes:
No-one crossed the road during the survey

Time	Blue Arrow	Red Arrow
2:00 to 2:30pm		
2:30 to 3pm		
3:00 to 3:30pm		
3:30 to 4pm		

Appendix B – Accident Data

Appendix C – Speed Survey Data

Langham A606 - Near School/Burley Road 2018
Bidirectional

N° Period	Date	Time	Average sp	Category1	Category2	Category3	Category4	Total
		00:00:00						
1	02/11/2018	00-24h	27	161	4240	221	143	4765
2	03/11/2018	00-24h	27	170	4692	151	93	5106
3	04/11/2018	00-24h	27	123	3923	78	70	4194
4	05/11/2018	00-24h	27	226	4844	286	267	5623
5	06/11/2018	00-24h	27	221	5201	352	270	6044
6	07/11/2018	00-24h	27	193	5199	260	240	5892
7	08/11/2018	00-24h	27	206	5357	322	243	6128
8	09/11/2018	00-24h	27	61	1395	101	105	1662
Stop		Average	= 27 Mile/h	1361 / 3 %	34851 / 88	1771 / 4 %	1431 / 4 %	39414 / 100%

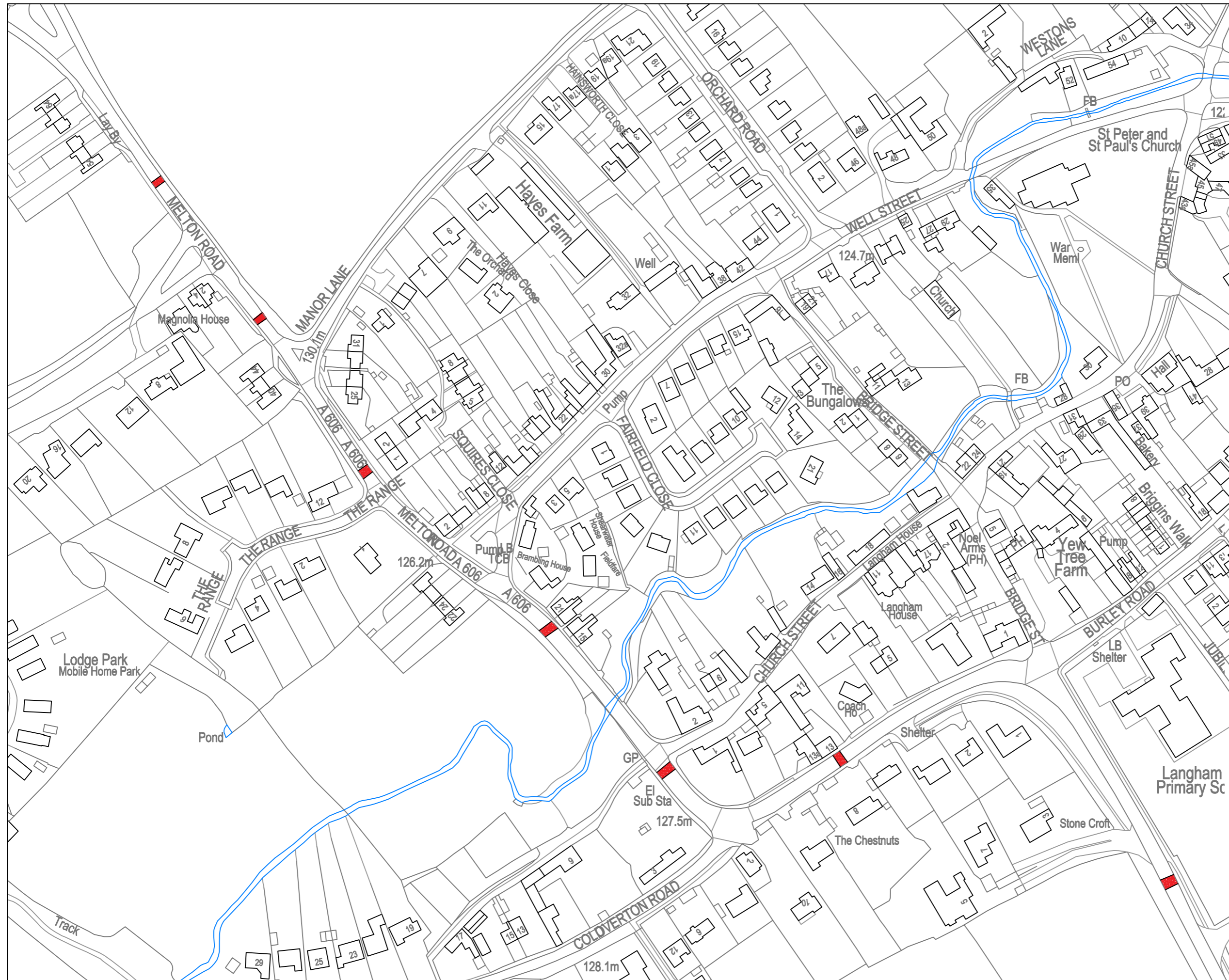
Date	Time	Class	C1 / 1 - 15	C2 / 16 - 30	C3 / 31 - 35	C4 / 36 - 40	C5 / 41 - 45	C6 / 46 - 50	C7 / 51 - 55	C8 / 56 - 60	C9 / 61 - 15	Total	Average [M	Excess. spe	V85 [Mile/h
	00:00:00														
#####	00:00:00	Category1	23	112	24	2	0	0	0	0	0	161	23	0	31
	24:00:00	Category2	49	3662	479	42	8	0	0	0	0	4240	27	0	30
	24:00:00	Category3	7	193	20	1	0	0	0	0	0	221	26	0	30
	24:00:00	Category4	3	139	1	0	0	0	0	0	0	143	24	0	27
1		Total volum	82	4106	524	45	8	0	0	0	0	4765	27	0	30
#####	00:00:00	Category1	26	119	19	6	0	0	0	0	0	170	23	0	30
	24:00:00	Category2	38	3889	700	56	6	2	1	0	0	4692	28	0	31
	24:00:00	Category3	5	135	10	1	0	0	0	0	0	151	26	0	29
	24:00:00	Category4	3	89	1	0	0	0	0	0	0	93	24	0	28
2		Total volum	72	4232	730	63	6	2	1	0	0	5106	27	0	31
#####	00:00:00	Category1	9	96	13	4	1	0	0	0	0	123	24	0	30
	24:00:00	Category2	11	3293	549	62	7	1	0	0	0	3923	28	0	31
	24:00:00	Category3	0	68	10	0	0	0	0	0	0	78	26	0	30
	24:00:00	Category4	1	68	1	0	0	0	0	0	0	70	24	0	27
3		Total volum	21	3525	573	66	8	1	0	0	0	4194	27	0	31
#####	00:00:00	Category1	27	168	25	6	0	0	0	0	0	226	23	0	30
	24:00:00	Category2	24	3995	749	73	2	1	0	0	0	4844	27	0	31
	24:00:00	Category3	7	245	28	6	0	0	0	0	0	286	26	0	30
	24:00:00	Category4	0	260	7	0	0	0	0	0	0	267	25	0	27
4		Total volum	58	4668	809	85	2	1	0	0	0	5623	27	0	31
#####	00:00:00	Category1	27	164	23	7	0	0	0	0	0	221	23	0	30
	24:00:00	Category2	35	4342	748	68	6	1	1	0	0	5201	27	0	31
	24:00:00	Category3	8	314	28	1	1	0	0	0	0	352	26	0	30
	24:00:00	Category4	5	259	5	1	0	0	0	0	0	270	24	0	27
5		Total volum	75	5079	804	77	7	1	1	0	0	6044	27	0	30
#####	00:00:00	Category1	22	142	26	2	1	0	0	0	0	193	23	0	31
	24:00:00	Category2	34	4356	728	74	7	0	0	0	0	5199	27	0	31
	24:00:00	Category3	7	230	22	1	0	0	0	0	0	260	26	0	30
	24:00:00	Category4	2	233	5	0	0	0	0	0	0	240	24	0	27
6		Total volum	65	4961	781	77	8	0	0	0	0	5892	27	0	30
#####	00:00:00	Category1	26	146	32	2	0	0	0	0	0	206	23	0	31
	24:00:00	Category2	39	4429	816	66	5	1	0	1	0	5357	27	0	31
	24:00:00	Category3	8	279	34	1	0	0	0	0	0	322	26	0	30
	24:00:00	Category4	3	235	5	0	0	0	0	0	0	243	24	0	27
7		Total volum	76	5089	887	69	5	1	0	1	0	6128	27	0	31
#####	00:00:00	Category1	4	43	12	1	1	0	0	0	0	61	25	0	31
	24:00:00	Category2	5	1119	241	26	4	0	0	0	0	1395	28	0	32
	24:00:00	Category3	1	84	16	0	0	0	0	0	0	101	27	0	31
	24:00:00	Category4	0	102	3	0	0	0	0	0	0	105	25	0	27
8		Total volum	10	1348	272	27	5	0	0	0	0	1662	27	0	31
/ 1	Total global	Category1	164	990	174	30	3	0	0	0	0	1361	23	0	31
/ 2	Total global	Category2	235	29085	5010	467	45	6	2	1	0	34851	27	0	31
/ 3	Total global	Category3	43	1548	168	11	1	0	0	0	0	1771	26	0	30
/ 4	Total global	Category4	17	1385	28	1	0	0	0	0	0	1431	24	0	27
Statistics		Total volum	459	33008	5380	509	49	6	2	1	0	39414	27	0	31

Langham A606 near Well Street 2018
Bidirectional Data

N° Period	Date	Time	Average sp	Category1	Category2	Category3	Category4	Total
		00:00:00						
1	13/11/2018	00-24h	27	148	3752	56	106	4062
2	14/11/2018	00-24h	27	359	8850	277	345	9831
3	15/11/2018	00-24h	27	341	8769	333	333	9776
4	16/11/2018	00-24h	27	359	9138	267	327	10091
5	17/11/2018	00-24h	27	273	7585	82	102	8042
6	18/11/2018	00-24h	27	268	5684	86	68	6106
Stop		Average	= 27 Mile/h	1748 / 4 %	43778 / 91	1101 / 2 %	1281 / 3 %	47908 / 100%

Date	Time	Class	C1 / 1 - 15	C2 / 16 - 30	C3 / 31 - 45	C4 / 36 - 40	C5 / 41 - 45	C6 / 46 - 50	C7 / 51 - 55	C8 / 56 - 60	C9 / 61 - 15	Total	Average [M	Excess. spe	V85 [Mile/h
	00:00:00														
#####	00:00:00	Category1	26	114	8	0	0	0	0	0	0	148	21	0	28
	24:00:00	Category2	6	3096	505	112	28	5	0	0	0	3752	27	0	31
	24:00:00	Category3	0	51	4	1	0	0	0	0	0	56	26	0	29
	24:00:00	Category4	0	100	4	2	0	0	0	0	0	106	26	0	29
1		Total volun	32	3361	521	115	28	5	0	0	0	4062	27	0	31
#####	00:00:00	Category1	59	273	23	3	0	1	0	0	0	359	21	0	29
	24:00:00	Category2	12	7397	1133	247	50	10	0	1	0	8850	27	0	31
	24:00:00	Category3	3	244	26	4	0	0	0	0	0	277	26	0	30
	24:00:00	Category4	0	308	34	3	0	0	0	0	0	345	26	0	30
2		Total volun	74	8222	1216	257	50	11	0	1	0	9831	27	0	31
#####	00:00:00	Category1	47	262	24	8	0	0	0	0	0	341	22	0	29
	24:00:00	Category2	26	7310	1132	233	58	9	1	0	0	8769	27	0	31
	24:00:00	Category3	1	291	35	6	0	0	0	0	0	333	27	0	30
	24:00:00	Category4	0	313	19	1	0	0	0	0	0	333	26	0	29
3		Total volun	74	8176	1210	248	58	9	1	0	0	9776	27	0	31
#####	00:00:00	Category1	55	287	16	1	0	0	0	0	0	359	21	0	27
	24:00:00	Category2	25	7732	1102	240	31	7	1	0	0	9138	27	0	31
	24:00:00	Category3	0	248	18	1	0	0	0	0	0	267	26	0	29
	24:00:00	Category4	0	287	33	7	0	0	0	0	0	327	27	0	30
4		Total volun	80	8554	1169	249	31	7	1	0	0	10091	27	0	30
#####	00:00:00	Category1	45	186	38	3	1	0	0	0	0	273	22	0	31
	24:00:00	Category2	14	6024	1240	251	51	4	1	0	0	7585	28	0	32
	24:00:00	Category3	0	72	9	1	0	0	0	0	0	82	27	0	30
	24:00:00	Category4	0	87	15	0	0	0	0	0	0	102	27	0	30
5		Total volun	59	6369	1302	255	52	4	1	0	0	8042	27	0	32
#####	00:00:00	Category1	26	204	33	4	1	0	0	0	0	268	23	0	30
	24:00:00	Category2	7	4634	845	177	16	5	0	0	0	5684	27	0	32
	24:00:00	Category3	0	71	10	5	0	0	0	0	0	86	27	0	32
	24:00:00	Category4	0	61	7	0	0	0	0	0	0	68	27	0	30
6		Total volun	33	4970	895	186	17	5	0	0	0	6106	27	0	31
/ 1		Total global	258	1326	142	19	2	1	0	0	0	1748	22	0	29
/ 2		Total global	90	36193	5957	1260	234	40	3	1	0	43778	27	0	31
/ 3		Total global	4	977	102	18	0	0	0	0	0	1101	27	0	30
/ 4		Total global	0	1156	112	13	0	0	0	0	0	1281	27	0	30
Statistics		Total volun	352	39652	6313	1310	236	41	3	1	0	47908	27	0	31


Appendix D – Preliminary Scheme Drawings



Notes:
Red high friction surfacing with SLOW marking

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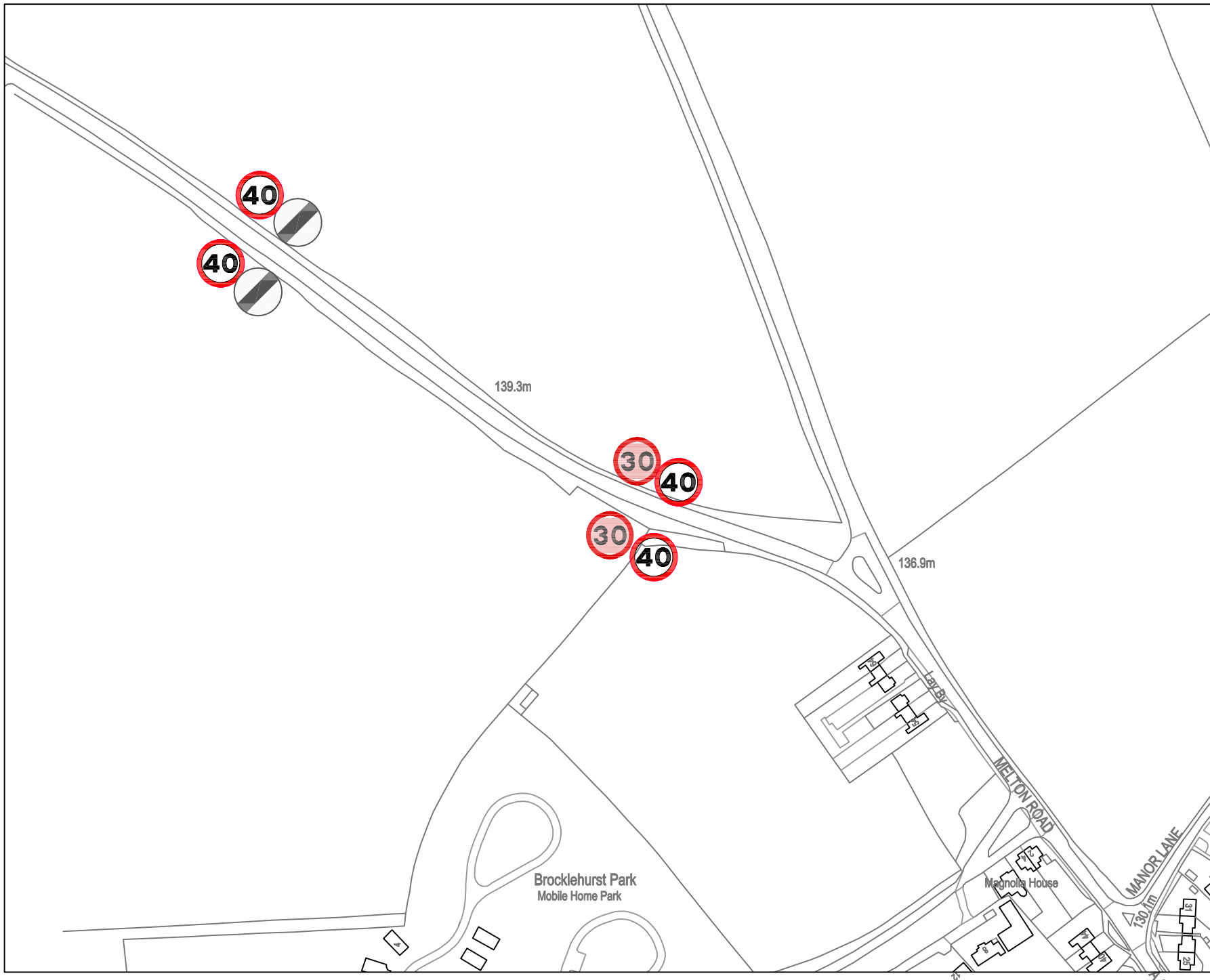
Rev:	By:	Date:	Details:

 **Rutland County Council**
 Community Services

Project:
 ITCP-2017-12
 Langham

Title:
 Red High Friction Surfacing with SLOW markings

Scale:	NA	Drawn by:	RG	Drawing No:	ITCP-2017-12-01
Date:	15/11/2018	Checked by:			



Notes:

- Remove existing national speed limit signs and replace with 2 new 40mph sign
- Install buffer zone 250m north of existing 30mph limit.
- Install 2 new posts, 2 new 40mph sign and reuse national speed limit sign

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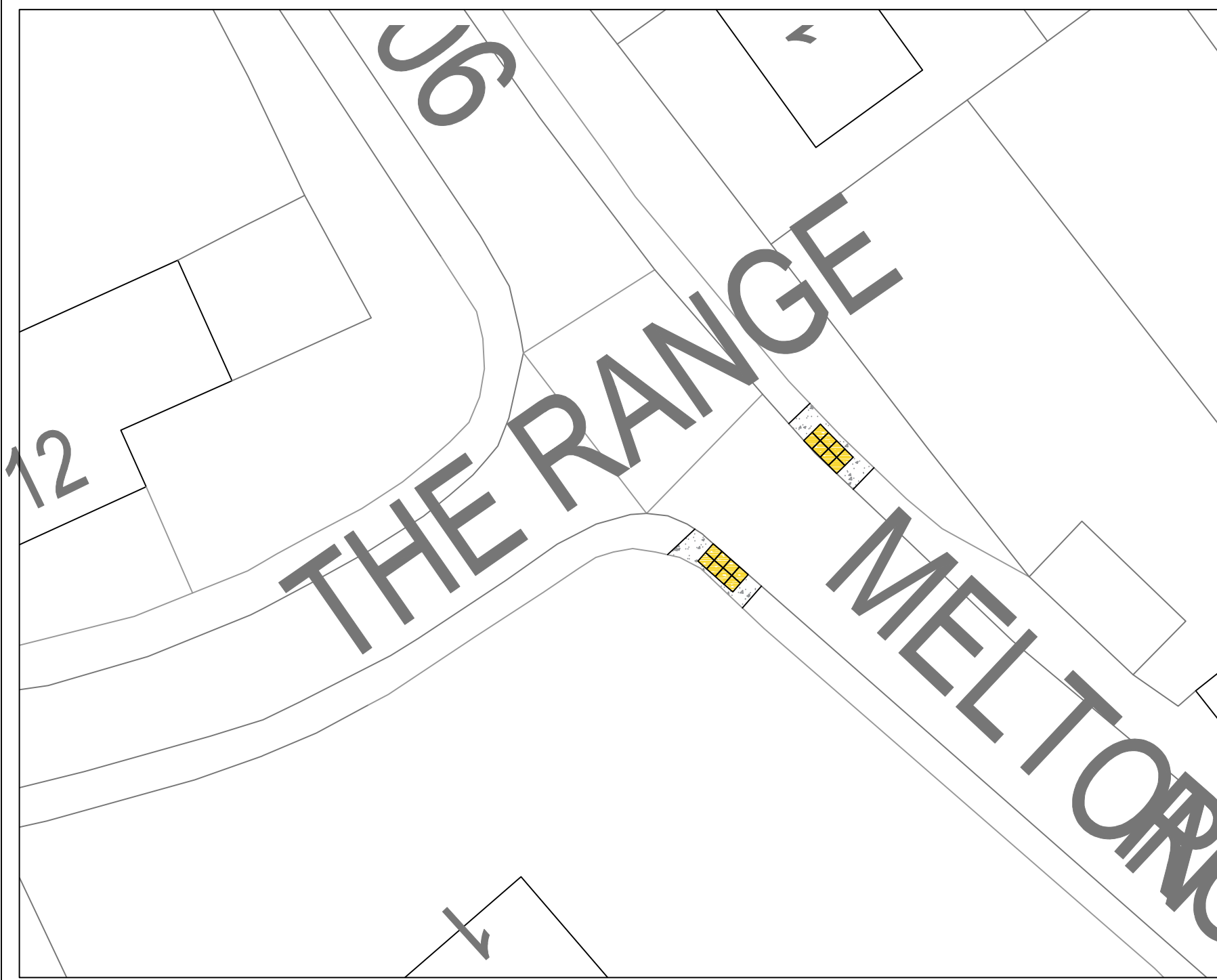
Rev: By: Date: Details:

 **Rutland County Council**
Community Services
Services

Project:
ITCP-2017-12
Langham

Title:
40mph Buffer Zone north of Langham

Scale: N/A	Drawn by: RG	Drawing No.:
Date: 15/11/2018	Checked by:	ITCP-2017-12-02



Notes:

Install a drop kerb crossing, including tactile paving and footpath reinstatement

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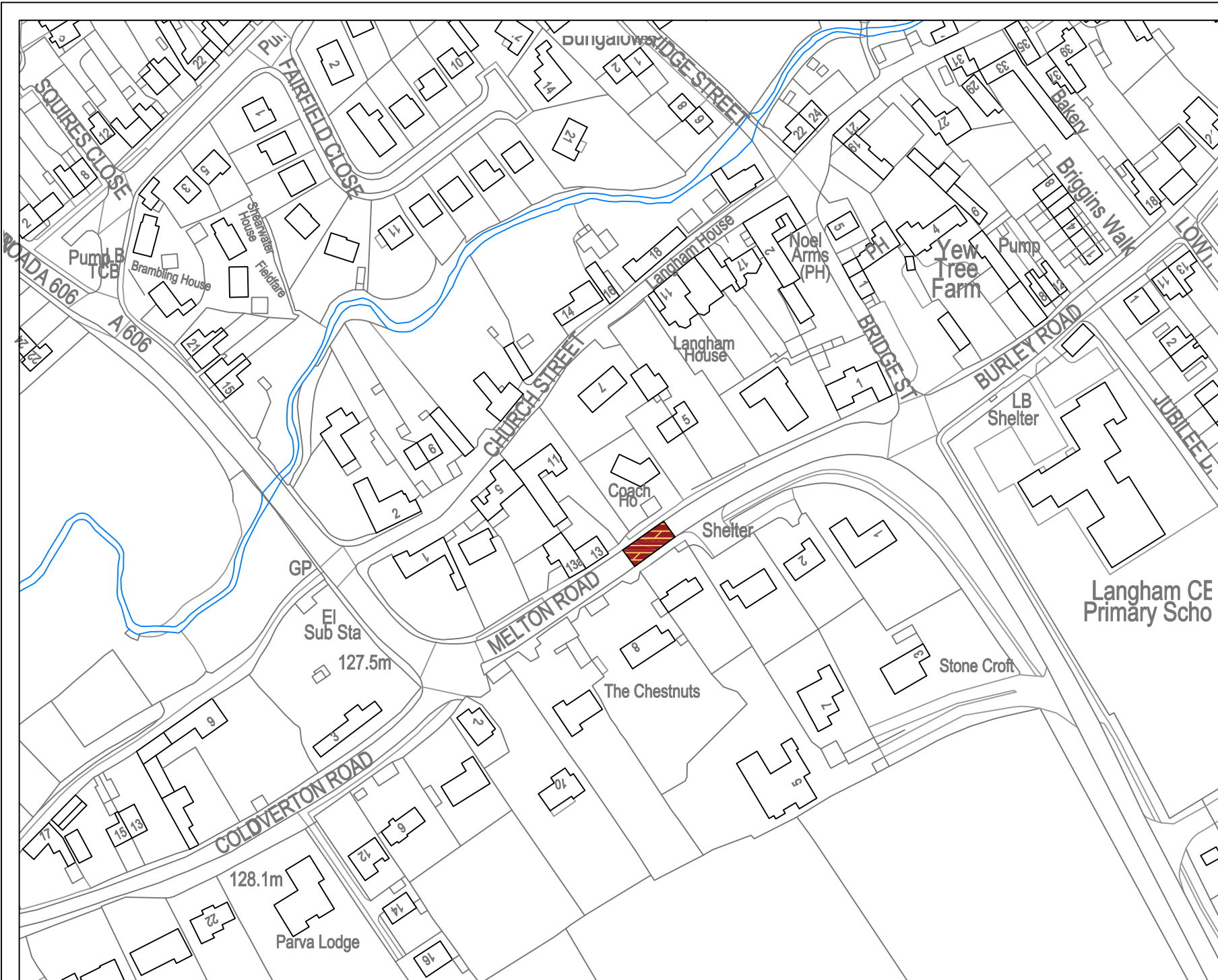
Rev: By: Date: Details:

 **Rutland County Council
Community Services
Services**

Project:
ITCP-2017-12
Langham


Title:
Dropped kerb crossing

Scale: N/A	Drawn by: RG	Drawing No.:
Date: 15/11/2018	Checked by:	ITCP-2017-12-03



Notes:
Possible location of Pelican Crossing.

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Rev: By: Date: Details:
 Rutland County Council
Community Services
Services

Project:
ITCP-2017-12
Langham

Title:
Pelican Crossing -
possible location

Scale: N/A	Drawn by: RG	Drawing No.:
Date: 15/11/2018	Checked by:	ITCP-2017-12-04