

Technical Note - DRAFT

Project:	Land at Empress Way, Ludgershall	SMA Ref:	5988
Subject:	Berrys Public Footpath Crossing		
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1.0 INTRODUCTION

- 1.1. Stuart Michael Associates (SMA) has been commissioned by Fowler Architecture and Planning to prepare a Technical Note (TN) to review the comments made by Network Rail as a consultee regarding potential residential development on land to the south of Empress Way, Ludgershall.
- 1.2. Policy H1.1 of the emerging Wiltshire Housing Site Allocations DPD allocates, among others, a site to the south of Empress Way for up to 270 residential units. Previously the draft allocation also included a new Primary School, however a recent review of need indicates this is no longer needed, as the new 2 form entry Primary School is being provided as part of the Corrunna Barracks development will meet the need for projected places up to 2026.
- 1.3. As part of the consultation process Network Rail was consulted on potential allocations. Network Rail raised concern regarding the potential cumulative impact of future development on the existing public footpath crossing over the railway line, known as Berrys crossing. Network Rail (NR) requested a review of the impact of the development on the rail infrastructure and indicated this may be resolved by the diversion of the existing PROW from Berrys crossing to a new route along Empress Way and Simonds Road.
- 1.4. The railway line is not a commercial line but is a branch line used by the military. Use of the line is therefore infrequent and train speeds low.
- 1.5. This TN specifically considers the use of the existing route alongside the desirability of the alternative route suggested by NR. It also considers the potential impact, if any, a circa 270 unit residential development could have on the crossing.

2.0 EXISTING SITUATION

- 2.1. Ludgershall is a small town to the west of Andover. Many village facilities are to the north of railway line, such as convenience stores (Co-op/Tesco), Ludgershall Castle primary school, Post Office and recreational areas. Where as to the south is predominantly existing residential estates.
- 2.2. The Berrys crossing links Empress Way with Andover Road (A342). It forms part of a Public Right of Way (PRoW), LUDG1 (Wiltshire Interactive Map). The PRoW runs south from Andover Road, over the railway line, through the centre of the existing residential estate and south towards Perham Down.

- 2.3. The section between Empress Way and Andover Road is approximately 70m in length, paved and lit. Dropped kerbing is provided onto Empress Way and Andover Road. A short section of the route runs through the Co-Op car park (along the eastern boundary). This section is defined by a footpath.
- 2.4. On Empress Way an uncontrolled crossing point is provided linking directly to the existing residential properties opposite. This uncontrolled crossing also has dropped kerbing, tactile paving and coloured surfacing marking its location on Empress Way.
- 2.5. **Photographs 1-3** below, show the existing route across the railway from the Co-Op car park through to Empress Way. Photographs 4 and 5 show the visibility along the railway line from the edge of the crossing.

Photograph 1 – Looking north towards Andover Road



Photograph 2 – Looking east behind the Co-Op building



Photograph 3 – Looking south across the railway line towards Empress Way



Photograph 4 and 5 – Visibility along the railway line from the edge of the crossing



- 2.6. From the photographs it can be seen that the existing route provides a good quality route from the existing residential areas and the future development site, located to the south of the railway line, to the facilities in the town centre to the north.
- 2.7. **Photographs 4 and 5** show that there is high quality visibility along the length of the railway line in both directions from the edge of the crossing. Allowing all users clear visibility of trains approaching.
- 2.8. From the centre of the proposed site, the distance to Andover Road and the start of the town centre via Berrys Crossing is some 755m.
- 2.9. Two possible alternative routes have been considered.
- **Alternative route 1** – from the centre of the site travelling north via Empress Way. This route involves an excessive detour to cross the railway at the Tidworth Road Bridge to the west and then coming back along Andover Road, effectively doubling back on oneself. This route is approximately 1.5km from the same centre point location when compared to using the Berrys crossing route;
 - **Alternative route 2** – from the centre of the site travelling west along Simonds Road. As with the above route this involved quite a detour to the west, travelling through the existing residential estate and then north using Tidworth Road Bridge. To reach the same point on Andover Road the route is 1.6km.
- 2.10. From this assessment it can be seen that the Berrys crossing is a safe, direct route to existing facilities in the town centre. This route is significantly shorter than alternatives and so is the most desirable route.

3.0 SURVEY OF CROSSING

- 3.1. The Berrys crossing sits on a branch line that was built to serve the military depot off Tidworth Road to the west of the proposed allocation. Rail usage figures for the line have not been obtained from Network Rail however, local residents suggest some 2-3 trains a year use the line.
- 3.2. SMA commissioned a 24hr 7-day pedestrian and train survey of the Berrys crossing. The survey was undertaken between the 19th to the 26th of February 2018. The survey recorded no trains during this period. **Appendix A** contains a copy of the survey data. A summary of the total two way pedestrian flow at the crossing per day is provided below.

Day	Two way flow
Monday	365
Tuesday	390
Wednesday	414
Thursday	374
Friday	402
Saturday	407
Sunday	376

- 3.3. The survey recorded an average daily two-way pedestrian flow of 390. The survey also recorded higher flows heading north towards the Andover Road in the AM and the reverse in the PM where higher flows were recorded heading south from the Andover Road.
- 3.4. This indicates that this is a key route from the existing residential areas to the town centre and is well used by existing residents. These existing residents are therefore likely to object to any rerouting of the existing PROW, given that the alternative routes are significantly longer.
- 3.5. Considering the information presented above including the shorter route via the Berrys crossing, local knowledge of the railway line usage and the location of facilities to the north of the railway line, the route via the crossing is likely to be the principal desire line.

4.0 FUTURE DEVELOPMENT TRIP ASSESSMENT

- 4.1. As noted above, the site is proposed for allocation and as such a full transport assessment including trip rates has been produced. Previous work into the assessment of the likely trip generation and mode share of the proposed development has been submitted within a Transport Assessment produced by WYG (Oct 2016). This report assessed the potential future use of the crossing from a 270 unit residential development using the TRICS database to obtain a robust trip rate and Census 2011 modal share data for Ludgershall and Perham Down Ward.
- 4.2. **Table 4.1** details the breakdown of trips by mode and provides an estimation of the potential number of two-way peak hour trips based on the WYG assessment.

Table 4.1: Potential Modal Split

Mode of Travel	Modal Share (Wiltshire 041C)	AM Two Way	PM Two Way
Car Driver	67.7%	183	157
Walk	16.4%	44	38
Cycle	2.9%	8	7
Public Transport	5.2%	14	12
Car Passenger	5.5%	15	13
Other Modes (inc. taxi)	1%	6	5
Total People Trips	100%	270	232

Note: Data taken from Transport Assessment provided for Land South of Ludgershall by WYG.

- 4.3. From **Table 4.1** it can be seen trips by foot equate to 16.4% or 44 additional two-way trips in the AM peak and 38 additional two-way trips in the PM peak. This equates to less than 1 additional pedestrian trip per minute in either peak. The addition of this number of additional trips to the Berrys Crossing will have no material impact on the operation of the crossing.
- 4.4. Furthermore, the Corrunna Barracks development located to the west of the proposed site (south of the railway line) will provide a new 2 form entry Primary School. This is due to be open by September 2019. This new school will serve both the existing residential areas to the south of the railway line and the future site to the south of Empress Way.

- 4.5. Existing residents would currently be travelling to the Ludgershall Castle Primary School, located north of the railway line. Therefore any potential primary education trips associated with the proposed development will be serviced without the need to cross the railway line and any pedestrian trips on the crossing associated with existing resident's trips to the Ludgershall Castle Primary School would also be removed.
- 4.6. Overall the addition of the proposed development could add less than 1 pedestrian trip per minute in the peak hours to the crossing. This will have no material impact on the operation of the crossing. The provision of a new Primary School on the Corrunna Barracks site may also result in the reduction of some existing school related trips as existing and future residents would have access to the new school.

5.0 SUMMARY & CONCLUSIONS

- 5.1. This Technical Note has been produced by SMA in support of a potential site allocation within the emerging Wiltshire Housing Sites Allocation DPD. The note considers Network Rail's concerns regarding the calculative impact on the Berrys crossing of a potential residential development on land to the south of Empress Way, Ludgershall.
- 5.2. The Berrys public footpath crossing links Andover Road with Empress Way. The existing crossing is paved and lit and has clear visibility along the railway line from the edge of the crossing. The Berrys crossing is the most desirable pedestrian route from both the existing residential estates to the south of the railway line and the proposed development site to existing facilities in the town centre to the north. Alternative routes, as suggested by NR are significantly longer and so would be less desirable. Any alteration of the PROW away from the shorter desire line would likely be objected to by existing residents.
- 5.3. The railway line is a branch line which serves a military depot to the west and is used by very infrequent, slow moving train services.
- 5.4. A pedestrian and train survey were undertaken of the crossing in preparation of this note. The survey recorded no trains using the railway line during the 7-day survey period. The survey recorded an average daily two-way flow of 390 pedestrian using the crossing.
- 5.5. Network Rail raised a concern about the potential cumulative impact of future residential development on the crossing as part of the consultation process for the proposed site allocation. Using Census 2011 modal share data for Ludgershall and trip rates from TRICS, it is estimated that the proposed development could generate some 44 additional pedestrian two-way trips in the AM peak and some 38 in the PM peak. This equates to less than 1 additional trip per minute.
- 5.6. The provision of a new Primary School on the Corrunna Barracks site may also result in the reduction of some existing school related trips as existing and future residents would have access to the new school.

- 5.7. Taking all the above into account it is concluded that there are no current safety or visibility concerns relating to the use of the existing crossing. The number of trains using the line are very few and slow moving. Therefore the addition of less than 1 pedestrian trip per minute in the peak hour, as a result of the proposed residential allocation to the south of Empress Way, will have no material impact on the existing Berrys crossing.

APPENDIX A

PEDESTRIANS CROSSING RAIL LINE OFF EMPRESS WAY LUDGERSHALL

TIME	MON 19 FEB		TIME	TUES 20 FEB		TIME	WEDS 21 FEB		TIME	THURS 22 FEB		TIME	FRI 23 FEB		TIME	SAT 24 FEB		TIME	SUN 25 FEB		TIME	MON 26 FEB	
	TO A342	FROM A342		TO A342	FROM A342		TO A342	FROM A342		TO A342	FROM A342		TO A342	FROM A342		TO A342	FROM A342		TO A342	FROM A342		TO A342	FROM A342
00:00			00:00	0	0	00:00	0	0	00:00	0	0	00:00	0	0	00:00	0	0	00:00	0	0	00:00	0	1
01:00			01:00	0	0	01:00	0	0	01:00	0	0	01:00	0	0	01:00	0	0	01:00	0	0	01:00	0	0
02:00			02:00	0	0	02:00	0	0	02:00	0	0	02:00	0	0	02:00	0	0	02:00	0	0	02:00	0	0
03:00			03:00	0	0	03:00	0	0	03:00	0	0	03:00	0	0	03:00	0	0	03:00	0	0	03:00	0	0
04:00			04:00	0	0	04:00	0	0	04:00	0	0	04:00	0	0	04:00	0	0	04:00	0	0	04:00	0	0
05:00			05:00	1	0	05:00	1	0	05:00	1	0	05:00	0	0	05:00	0	0	05:00	0	0	05:00	1	0
06:00			06:00	3	1	06:00	2	2	06:00	3	2	06:00	2	1	06:00	2	0	06:00	1	0	06:00	3	2
07:00			07:00	11	5	07:00	14	6	07:00	12	4	07:00	12	7	07:00	7	4	07:00	2	3	07:00	13	6
08:00			08:00	37	9	08:00	41	8	08:00	42	5	08:00	46	7	08:00	13	5	08:00	11	10	08:00	42	8
09:00			09:00	14	12	09:00	11	13	09:00	7	12	09:00	13	8	09:00	14	14	09:00	17	7	09:00	8	8
10:00			10:00	8	9	10:00	9	8	10:00	9	11	10:00	9	8	10:00	10	11	10:00	13	19	10:00	8	6
11:00	7	7	11:00	10	9	11:00	11	11	11:00	11	9	11:00	10	10	11:00	16	13	11:00	18	19			
12:00	8	8	12:00	12	6	12:00	13	6	12:00	4	7	12:00	11	14	12:00	7	12	12:00	19	8			
13:00	4	4	13:00	6	3	13:00	7	4	13:00	5	4	13:00	10	12	13:00	8	13	13:00	19	16			
14:00	26	8	14:00	26	9	14:00	30	10	14:00	20	10	14:00	19	7	14:00	15	10	14:00	19	14			
15:00	9	45	15:00	22	42	15:00	19	41	15:00	23	34	15:00	14	35	15:00	11	9	15:00	15	20			
16:00	15	19	16:00	11	21	16:00	17	23	16:00	7	18	16:00	12	11	16:00	11	22	16:00	21	21			
17:00	14	12	17:00	14	14	17:00	11	12	17:00	18	17	17:00	7	15	17:00	22	15	17:00	15	9			
18:00	13	15	18:00	13	14	18:00	15	11	18:00	11	17	18:00	20	20	18:00	19	18	18:00	6	13			
19:00	11	6	19:00	8	7	19:00	12	5	19:00	9	9	19:00	20	14	19:00	8	19	19:00	6	10			
20:00	4	5	20:00	6	8	20:00	5	9	20:00	5	5	20:00	5	5	20:00	7	22	20:00	2	5			
21:00	6	6	21:00	6	9	21:00	9	11	21:00	3	10	21:00	3	2	21:00	8	11	21:00	7	8			
22:00	1	3	22:00	1	1	22:00	0	2	22:00	1	6	22:00	3	8	22:00	14	5	22:00	0	2			
23:00	1	2	23:00	0	2	23:00	1	4	23:00	1	2	23:00	0	2	23:00	6	6	23:00	0	1			
TOTALS	119	140		209	181		228	186		192	182		216	186		198	209		191	185		75	31

WEEKLY AVERAGE TWO WAY FLOW
390