
ACCIDENT INVESTIGATION AND PREVENTION REPORT

ACCIDENT STUDY



**A49 – PRESTON ROAD
3.05KM – 6.15KM
CHARNOCK RICHARD**



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3rd March 2008

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INTRODUCTION

This report has been produced following a study of road traffic accidents occurring on A49, Preston Road, 3.05KM – 6.15KM, Charnock Richard as a result of :-

The site's position in the County's annual programme of investigations

The study was undertaken by :-

KATHRYN EASTLAND ROAD SAFETY ENGINEER (AIP)

TERMS OF REFERENCE

The terms of reference for the study are those described in Section 3.1 of the Department of Transport Accident Investigation Manual. The Study Team has examined and reported only on the road safety implications of the site and has not examined or verified the compliance of any of its features to any other criteria except where specified.

DOCUMENTS

Accident spotplots, individual accident printouts and balloon plots are available. Some are attached.

Police and witness statements have been examined.	No
Photographs are available.	Yes
Pedestrian and traffic count information is available.	Yes
Speed measurement data is available.	Yes
Vulnerable Road User Audit has been carried out.	Yes

A site inspection took place on **22nd January 2008**

Information pertaining to this investigation is available on the following file references :-

TRAFFIC AND SAFETY : TS/T9/CHO/41

STUDY LENGTH



Fig 1 – Whole study length.

The study length runs from the junction of the A49, Preston Road with Mill Lane in a northerly direction to the junction of the A49, Wigan Road with Dawber's Lane. The road is a main route from Chorley to Charnock Richard, with a single lane running in both directions. The national speed limit applies to the majority of the length, excluding the lengths of road from Pincock Bridge north, to Dawber's Lane and the A49 on the approach to the Mill Lane mini-roundabout to which a 30mph and 40mph speed limit applies respectively. Residential, retail and agricultural frontages are situated along the length of the route, along with a newly built crematorium. The road has several bends along its length, which are the location of a number of the accidents occurring within the study period. There are mini-roundabouts situated at the start and end of the route, the northern mini-roundabout situated at the junction

of the A49 with Dawber's Lane is also the location of a number of accidents.

ITEMS RAISED IN PREVIOUS STUDIES

A previous study completed in 1993 raised issues relating to a series of bends north of Church Lane adjacent to Hunters Lodge. As a result of the study an illuminated bend warning sign was placed south of the junction with additional slow carriageway markings and double white central carriageway lining were provided for the extent of the bend.

ACCIDENT RECORDS

The study commenced on 5th December 2007 and covered accidents occurring in the period 1st September 2002 to 31st August 2007. In this 5 year period there have been a total of 25 PIA's (personal injury accidents) resulting in the following accident record :-

Severity	May-Dec 2002	2003	2004	2005	2006	Jan-May 2007	Totals
Fatal	0	0	0	0	0	0	0
Serious	0	1	0	2	1	1	5
Slight	2	3	7	1	5	2	20
PIA total	2	4	7	3	6	3	25

The accidents resulted in **42** casualties :

Severity	Fatal	Serious	Slight	Casualty Total
Total	0	5	37	42

Of the accidents :-

Number	Accident Type	%
11	Incidents involving drivers under 25	44%
10	Skidding Incidents	40%
8	Accidents occurring at junctions	32%
8	Shunt type accidents	32%

ITEMS ARISING FROM THIS STUDY

Please refer to drawings reference A49- KE- 003 and 005.

Whole route issues

Speed data was collected in strategic locations along the study length. The resulting information indicated that 85th percentile speeds on approach to the mini-roundabout at Dawbers' Lane were in excess of the posted limit. Therefore consideration should be given as to the use of improved signing with interactive signing on approach to the 30mph gateway. It should be noted that this area of road is a community concern site and as such mobile enforcement units do target this area. The speeds along the remainder of the route are well within the posted speed limit and as such no further recommendations are given.

There are several signs along the route, which require repair or maintenance. As such we would recommend that routine maintenance be carried out along the entire length.

Section 1 : Problems



Fig 2 – Section 1 - from A49 / Mill Lane to Brook lane / Church Lane junctions.

The first section of the study length runs from the junction of the A49 with Mill Lane northerly, to the junction of Brook Lane and Church Lane. The national speed limit applies to this section of road with the exception to the section of road on the approach to the mini-roundabout at Mill Lane to which a 40mph speed limit applies. The length starts at the mini-roundabout with Mill Lane, which was put in place in 2002, the route then travels north encountering a double bend near Yew Tree Villas, which is the location of two serious accidents. Consideration should be given as to what measures could be put in place to reduce accidents on the double bend. The road continues south with a sweeping left-hand bend to the crossroads of Brook Lane and Church Lane, also the location of several

accidents. In total there have been 8 PIA's on this section of road, 3 of which have been serious with the remaining 5 being slight accidents. These resulted in a total of 11 casualties 3 of which sustained serious injuries and the remaining 8 sustained slight injuries.

The first accident occurred north of the Mill Lane junction when a motorcycle skidded on the wet road surface and collided with a vehicle in front. The accident occurred during the hours of darkness and involved a driver under the age of 25 travelling from the south. The accident resulted in slight injuries to the rider of the motorbike.

The next two accidents occurred on the bends near Yew Tree farm, both were single vehicle accidents involving motorbikes, travelling from the south, where the rider of the vehicle lost control and collided with a lighting column. Both accidents resulted in the riders sustaining serious injuries.

The fourth incident occurred when a driver, under the age of 25, attempted to overtake another vehicle. The driver loses control of the vehicle colliding with the nearside kerb and a tree before coming to rest in a ditch. There were two casualties with slight injuries as a result of the incident.

The remaining accidents all occurred at the crossroads of Brook Lane and Church Lane. Two of the accidents involved shunts on approach to the junction, both involved drivers under the age of 25 and resulted in 2 slight casualties. One of the accidents occurred with vehicles travelling from north to south and the other accident occurred when vehicles were travelling south to north.

The sixth accident on this section of road occurred when a vehicle travelling from the south turned right at the junction across the path of a motorcycle travelling from the north during the hours of darkness. The accident resulted in serious injuries to the rider of the motorcycle.

The final accident on this length of road involved a pedestrian being hit by a motorcycle travelling at excessive speed from south to north. The pedestrian suffered slight injuries as a result of the collision.

Section 1: Summary – A49/Mill Lane junction to A49/Brook Lane/Church Lane junction.

Accident Statistics

- 8 PIA's resulting in 11 Casualties, 3 serious.

Areas of Concern

- The mini-roundabout at Mill Lane.
- The double bends adjacent to Yew Tree Villas.
- The Brook Lane / Church Lane crossroads.

Section 1: Recommendations – See drawing reference A49-KE-003/004



Fig 3 – Mini roundabout at Mill Lane on approach from the north.



Fig 4 – Pedestrian / Cycle route sign obscuring roundabout signing.

There have been no reported injury accidents at the Mill Lane mini-roundabout. However, within the scope of this study and with a view to maintaining the current safety record some junction and signing improvements have been proposed.

- 1.1 The existing bar markings are worn and faded. Renew existing bar marking to the south of the junction.

- 1.2 The existing white lining and markings on and around the roundabout are worn. Renew the existing white lining at the junction, in particular the give way markings and mini-roundabout markings. This will improve the conspicuity of the mini-roundabout for drivers.
- 1.3 The mini-roundabout sign on the approach to the roundabout from the north is hard to distinguish from other street furniture. Re-site the existing pedestrian and cycle route sign (see fig 4) to improve visibility.

The existing 40mph gateway (see fig 4) is becoming worn and as a result its impact is reduced.

- 1.4 Renew the existing red 'textureflex' type surfacing and 40mph carriageway roundel.



The bends in the road adjacent to Yew Tree Villas currently have no warning signs to alert motorists to their presence.

- 1.5 Provide an illuminated double bend warning sign on approach to the bend from the south with an additional 'SLOW' carriageway marking adjacent to the sign.
- 1.6 Provide single chevrons on the right hand bend adjacent to Yew Tree Villas for vehicles approaching from both directions.
- 1.7 Provide single chevrons on the left hand bend adjacent to March House, for vehicles approaching from both directions.
- 1.8 Provide a double bend warning sign on the approach to the bend from the north with an additional 'SLOW' carriageway marking adjacent to the sign.

The crossroads of Brook Lane and Church Lane with the A49 (See fig 6) are the location of several accidents, two of which are specifically related to the junction. The junctions are hard to distinguish from a distance and are approach from both the north and south from around a bend.

- 1.9 Provide a new crossroads sign and mount on grey backing board with the existing bend in road sign mounted below for traffic approaching from the south.

Section 2: Problems



Section 2 commences at the junction of Brook Lane with Church Lane and runs north to the junction with Delph Lane. Along this section of road there are a few residential properties, however it is the commercial properties situated along this section of the study length, which have been the location of a number of accidents. These properties are the Hunter's Lodge Hotel situated on the apex of a bend, a large bike shop and a pub/restaurant on the corner of Old Hall Lane. Most accidents in this section occurred on the bend adjacent the Hotel and on the double bend adjacent Old Hall Lane and Delph Lane with the only other accident occurring at the entrance to the bike shop. The national speed limit applies to the whole section of road and has street lighting along the length. There have been a total of 10 accidents along this section of the road, resulting in a total of 17 casualties, 15 of which sustained slight injuries with the remaining 2 sustaining serious injuries.

There were six accidents that occurred on the bend adjacent to Hunter's Lodge Hotel. The first of which occurred when the driver, who was under the age of 25, lost control of their vehicle on the right hand bend when travelling from the north causing the vehicle to skid and overturn landing in a ditch. The accident occurred during the hours of darkness and the road surface was wet, the driver was considered to be driving at excessive speed for the conditions. A passenger in the vehicle sustained slight injuries.

The next two accidents occurred as a result of a vehicle turning right out of the hotel entrance. The first occurred when a vehicle travelling south on the main road encountered the right turning vehicle, the driver, who was under the age of 25, attempted to brake in order to avoid a collision but lost control and rolled the vehicle coming to rest in the hotel car park hitting several parked vehicles in the process. The accident occurred when the road surface was wet and resulted in 1 slight casualty.

The other accident occurred when a vehicle turned right out of the hotel entrance. The driver, who was blinded by the low sun, pulled out into the path of a vehicle travelling from the north. The accident resulted in two slight casualties.

The next accident occurred on the bend involving a lorry with an unsecured load, when the lorry negotiated the bend the load shifted and fell from the vehicle hitting a pedestrian. The accident resulted with one seriously injured casualty and one casualty sustaining slight injuries.

The fifth accident on this bend occurred when a vehicle exited from a private driveway turning right across the path of an oncoming vehicle travelling towards the south. The accident occurred during the hours of darkness and resulted in slight injuries to three people.

The final accident occurred when a vehicle attempted to overtake a line of stationary traffic, colliding with the vehicle at the front of the queue that was turning right into a private driveway. The accident occurred on a wet road surface and resulted in two people sustaining slight injuries.

Section 2: Summary – From the Brook Lane/Church Lane junction to the Old Hall Lane /Delph Lane junction.

Accident Statistics

- 10 PIA's resulting in 17 Casualties, 2 serious.

Areas of Concern

- The bend adjacent to Hunter's Lodge Hotel.
- The Double bend adjacent to Old Hall Lane and Delph Lane.

Section 2: Recommendations – See drawing reference A49-KE-004



The bend to the north of the Brook Lane / Church Lane crossroads currently has a double chevron sign positioned to warn drivers travelling from the south of the road layout.

- 2.1 For continuity of the scheme the existing double chevron sign should be replaced with single chevrons with yellow edging.

The crossroad junction is not clearly visible on approach from the north due to the road layout.

- 2.2 Provide a new crossroads warning sign and additional "SLOW" carriageway markings adjacent to the sign.

The bend adjacent to Hunter's Lodge Hotel is the location of several accidents. This is due to the road layout and the location of the hotel's access on this bend. Therefore, measures to improve driver awareness of the road layout and to inform them of the possibility of encountering emerging traffic should be considered.

- 2.3 Provide a new other danger ahead sign with supplementary "Turning Vehicles" sign on grey backing board with "SLOW" carriageway markings adjacent to the sign on approach to the hotel entrance from the south.
- 2.4 Remove existing double chevron signs and replace with two sets of three dual-sided single chevrons signs with yellow edges to alert drivers to the road layout when travelling from both the north and south.
- 2.5 Contact the Hunter's Lodge Hotel and request that existing signing located near the carpark entrance be relocated in order to improve sightlines for drivers exiting the carpark.

- 2.6 Provide a new other danger ahead sign with supplementary “Turning Vehicles” sign on grey backing board with “SLOW” carriageway markings adjacent to the sign on approach to the hotel entrance from the north.
- 2.7 Relocated the existing bend in road sign with supplementary “Reduce Speed Now” plate and place further from the junction for vehicles travelling from the north.

The double bend adjacent to the Old Hall Lane and Delph Lane side roads is the location of three accidents, all of which are the result of vehicle failing to negotiate the bends. There are currently no warning signs to alert drivers of the road layout for vehicles travelling from the south. To the north of the double bends there is an existing double bend sign with a supplementary “for a distance of 2 miles” plate below. The sign although providing some warning to drivers does not specifically highlight the upcoming double bend.

- 2.8 Provide a double bend warning sign with additional “SLOW” carriageway markings adjacent to the sign for vehicles approaching from the south.
- 2.9 Provide marker posts on the western side of the carriageway adjacent to the Bowling Green public house to better delineate the bend.
- 2.10 Provide marker posts on the eastern side of the carriageway adjacent to Tan House Farm to better delineate the bend.
- 2.11 Remove the existing “for 2 miles” supplementary plate from the post with the existing double bend sign on. Additional “SLOW” carriageway markings to be placed adjacent to the sign.

Section 3: Problems



Fig 9 – Section 3 from Delph Lane to Dawber's Lane / A49 junction.

The final section of the study runs in a northerly direction from Delph Lane to the Dawber's Lane junction with the A49. This section of road is national speed limit from Delph Lane to a point near Pincock Bridge at which point the speed limit changes to 30mph for the remainder of the length. There are a few residential and commercial frontages along this section of the route as well as a new crematorium, on the approach to the mini roundabout at Dawber's Lane the frontages are residential and commercial. The newly built crematorium brings cortèges of vehicles to the study length disrupting the normal traffic flows, however this does not appear to cause a significant problem at this time.

There have been a total of 7 accidents along this section of the road resulting in 14 casualties all sustaining slight injuries.

The first accident occurred on the approach to German Lane when an elderly driver collided with the rear of a parked HGV. The driver sustained slight injuries.

The next accident occurred at German Lane when a driver failed to give way to a vehicle travelling south on the main road. The driver turned right into the path of the oncoming vehicle. The accident resulted in 4 casualties all sustaining slight injuries.

The third accident involved a motorcyclist travelling at excessive speed and under the influence of alcohol. The rider was travelling south when a vehicle pulled out from a parked position at the side of the road into the path of the oncoming motorcycle, the rider braked heavily and skidded colliding with the

car before the rider fell from the bike. Both drivers sustained slight injuries as a result of the accident.

The final four accidents all occurred at the mini-roundabout at Dawber's Lane. All accidents involved vehicles travelling from the south failing to stop for the roundabout. The first of which was a shunt style accident when a vehicle travelling from the south failed to stop and collided with a stationary vehicle in front. The accident resulted in three people sustaining slight injuries.

The second accident was also a shunt style accident occurring when a vehicle travelling from the south collided with a stationary vehicle in front. One of the drivers sustained slight injuries as a result.

The next accident occurred when a driver travelling from the south, who was under the age of 25 and travelling at excessive speed, failed to give way to a vehicle already on the roundabout turning right. The accident resulted in slight injuries to one of the passengers.

The final accident involved a driver travelling from the south who failed to give way to a vehicle travelling from the north, turning right into Dawbers Lane. The accident resulted in two people sustaining slight injuries.

Section 2: Summary – From Delph Lane junction to Dawber's Lane junction

Accident Statistics

- 7 PIA's resulting in 14 Casualties.

Areas of Concern

- The existing 30mph gateway.
- The mini-roundabout at Dawber's Lane.

Section 3: Recommendations – See drawing reference A49 – KE – 005



3.1 The speed limit on the length of road on the approach to the crematorium is, at present, set at the national speed limit. Due to the new access to the crematorium we would suggest that the current speed limit be reduced to 40mph.

The signing at the crematorium could be changed in order to provide a clearer message to visitors. The advanced warning sign for the crematorium from the south is misleading to some drivers who slow down to turn left at the sign and the existing crematorium finger post at the junction for drivers approaching from the north is obscured by foliage.

- 3.2 Change the advanced warning sign so that the existing arrow is removed and replaced with the distance to the access road for vehicles travelling from the south.
- 3.3 Re-site the existing finger post to a more prominent position for vehicles travelling from the north.
- 3.4 Change the advanced warning sign so that the existing arrow is removed and replace with the distance to the access road for vehicles travelling from the north.



Fig 12 – 30mph gateway on approach from the south.

Fig 13 – Warning sign on approach to mini-roundabout at Dawber's Lane.

The existing 30mph gateway signing is obscured on approach from the south due to existing foliage.

- 3.5 Back Lane requires resurfacing in the vicinity of the junction, this is a maintenance issue that needs to be addressed.
- 3.6 Investigate the possibility of moving the existing 30mph gateway to a more prominent position at the mouth of the bridge. Additionally place red 'textureflex' type surfacing across the width of the carriageway with a 30mph roundel facing northbound traffic and dragon's teeth markings on approach and change the existing 30mph signing to interactive signs with flashing amber lights.

The existing roundabout sign is difficult to distinguish on approach from the south due to its location and the current state of maintenance (See fig 13).

- 3.7 Provide new roundabout signing on yellow backing board with additional distance to hazard plate underneath.



Fig14 – Approach to the mini roundabout at Dawber's Lane from the south.

The mini roundabout at Dawbers Lane is the location of several accidents. All involving vehicles travelling from the south, as such consideration should be given to remedial measures to improve the conspicuity of the mini roundabout to drivers.

- 3.8 Investigate the possibility of providing a small traffic island to the south of the mini-roundabout with additional roundabout signing in order to reinforce the location of the mini-roundabout.
- 3.9 Renew the existing mini-roundabout markings and white lining in the vicinity of the junction.

PROPOSALS

It is proposed that the above recommendations are implemented immediately with funding from the AIP allocation at an estimated cost of £ 35 000.

BENEFITS

It is estimated that the above proposals will save **2.4 PIA's** personal injury accidents per year based on the accidents that have occurred during the study period.

This approximates to a saving of **4** casualties per year.

The calculated first year rate of return (FYRR) =

$$\frac{2.4 \times 93,655 \times 100 \%}{35,000}$$

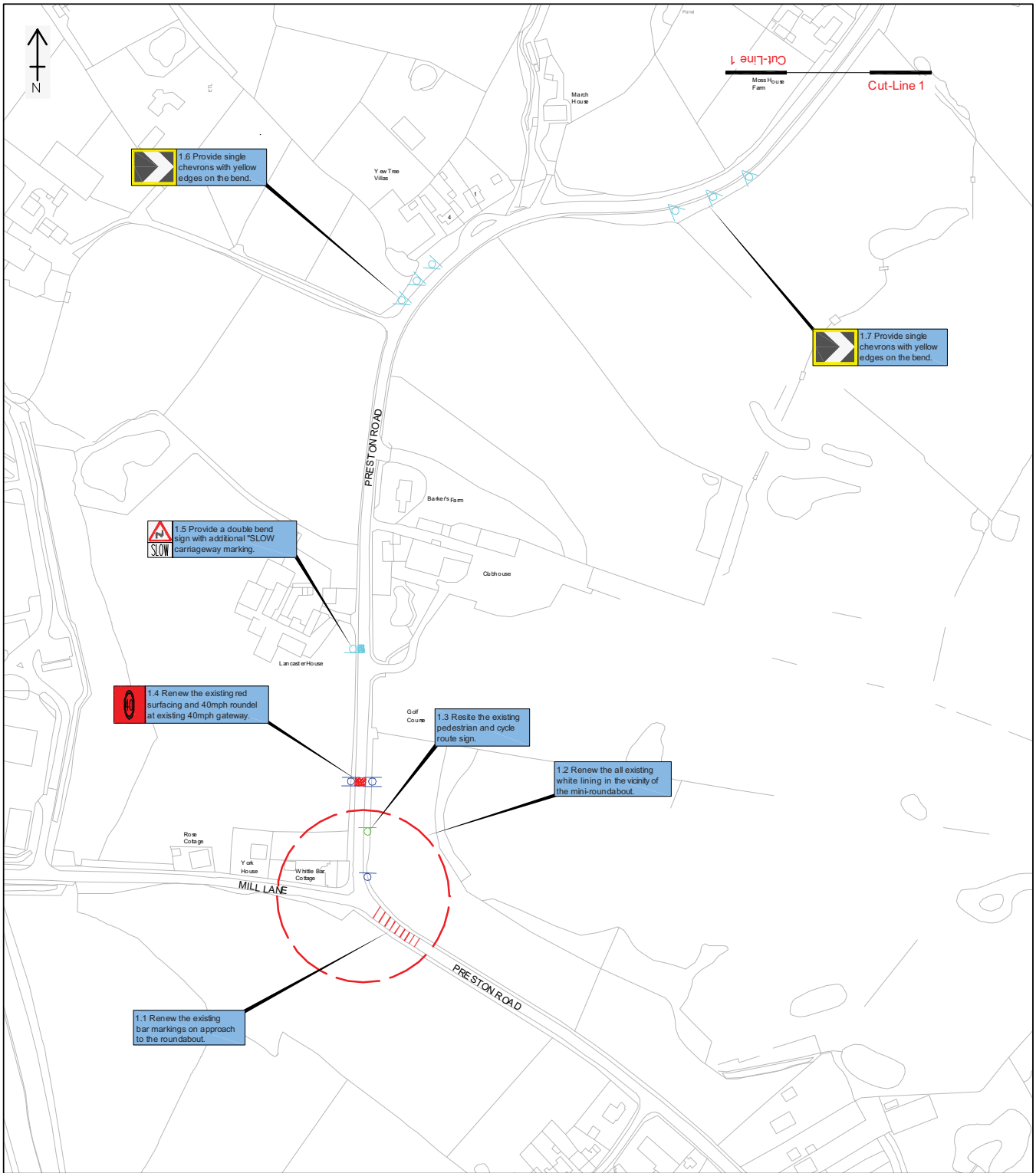
FYRR = 642 % based on June 2005 prices.

STUDY TEAM STATEMENT

I certify that I have examined the site, the accident record and other relevant information. The investigation was carried out with the sole purpose of identifying features of the site that could be removed or modified in order to improve the safety record of the site. The problems identified have been noted in this report together with any resulting safety improvements proposed which I recommend should be considered for implementation.

signed **Kathryn Eastland** AIP TEAM MEMBER
date

Kathryn Eastland ext 3818 3rd March 2008



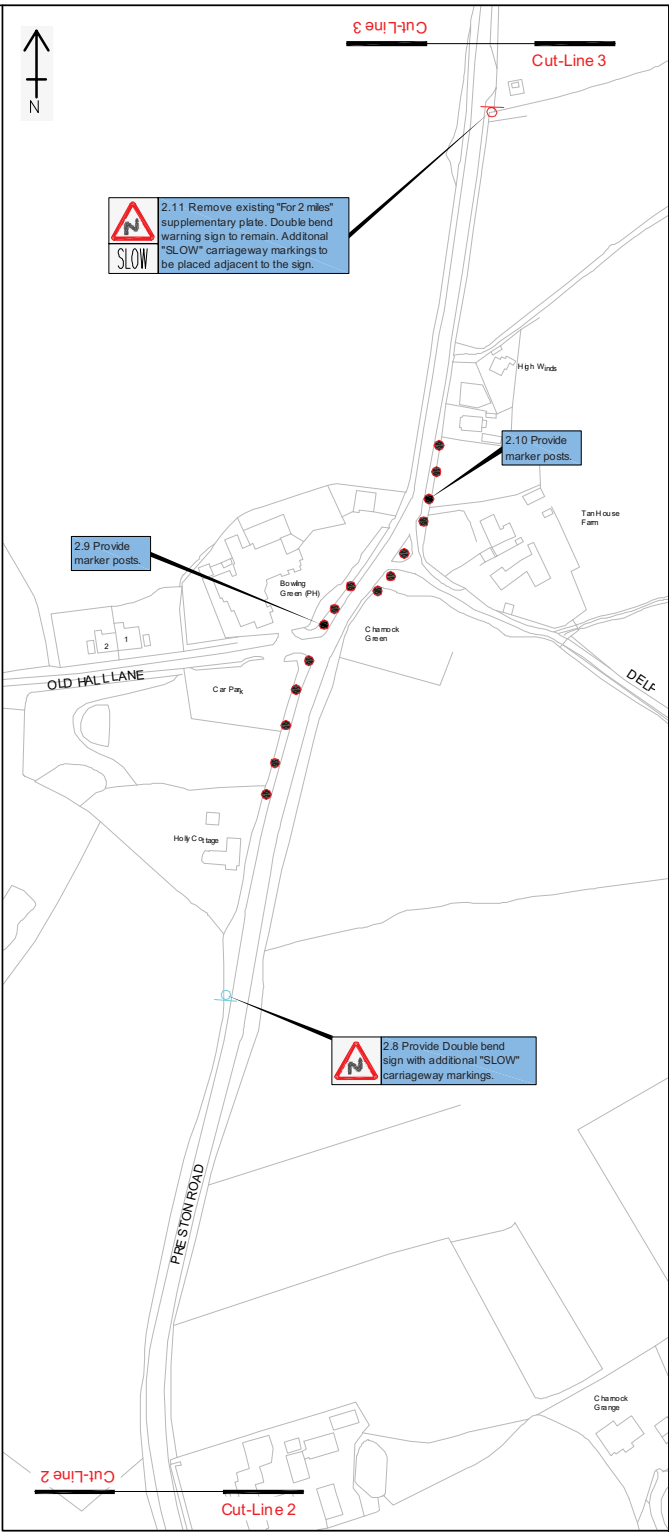
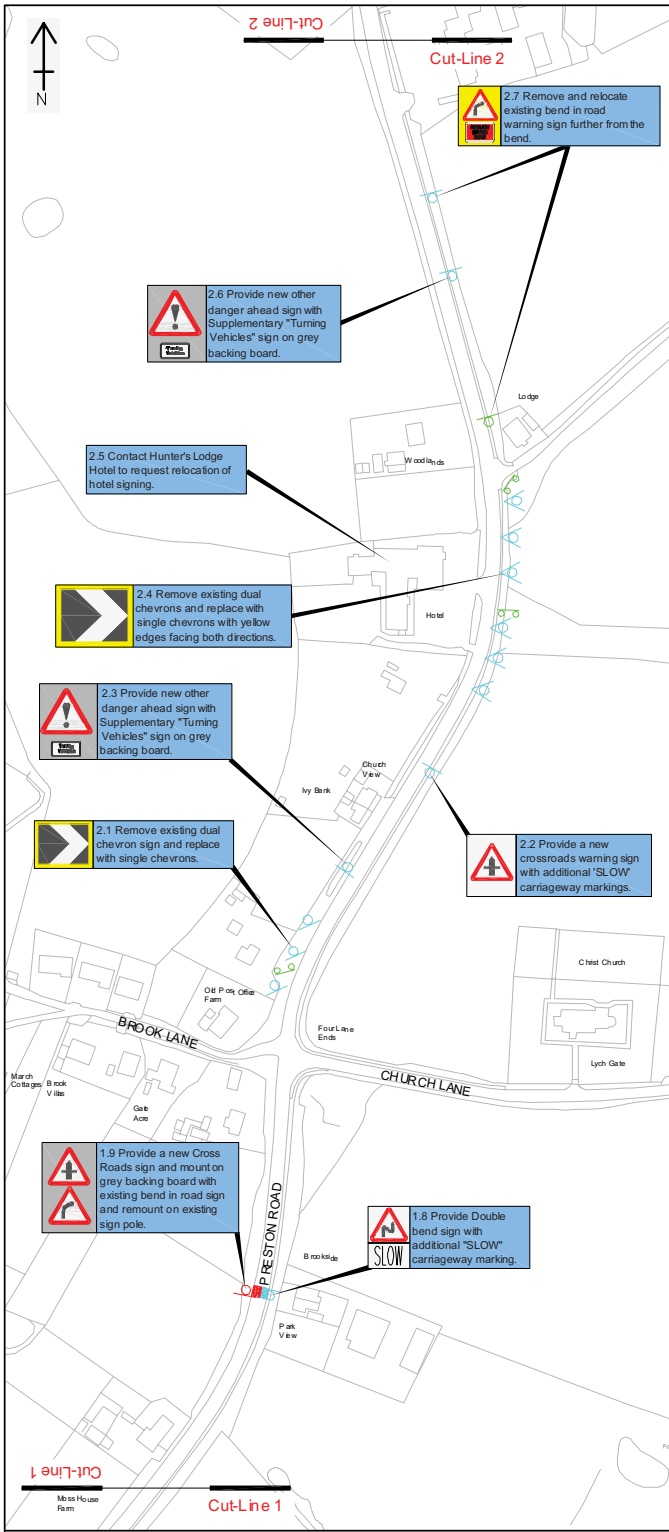
NOTES:
 The whole route requires general maintenance with regard to the repair and cleaning of signs as well as the current white lining along the length.

The data in this map is derived from the Ordnance Survey Landline dataset and is used here under Ordnance Survey Licence No. 100023320.

KEY:

Existing sign to be replaced.	Existing dual post sign to be removed.	Existing sign to remain.
Existing dual post sign to be replaced.	Existing road marking to be removed.	Existing dual post sign to remain.
Existing road marking to be replaced.	New sign and post.	Existing road marking to remain.
Existing sign and post to be removed.	New dual post sign.	Existing marker post.
	New road marking.	Proposed new marker post.

<p>GRAHAM HARDING BEng CEng FICE FIHT MCM Executive Director Lancashire County Council Guild House, Cross Street Preston, PR1 5RD</p>	PROJECT: A49 - PRESTON ROAD - CHARNOCK RICHARD		DATE: MARCH 2008	SCALE: 1:2500
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NOTES:
The whole route requires general maintenance with regard to the repair and cleaning of signs as well as the current white lining along the length.

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Existing sign and post to be removed.	Existing marker post.
Existing road marking to be removed.	Proposed new marker post.
New sign and post.	Existing road marking to remain.
New dual post sign.	Existing marker post.
New road marking.	Proposed new marker post.



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PROJECT:
A49 - PRESTON ROAD - CHARNOCK RICHARD

TITLE:
PROPOSED MEASURES
PAGE 2 OF 3

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