



STEWART PATON ASSOCIATES

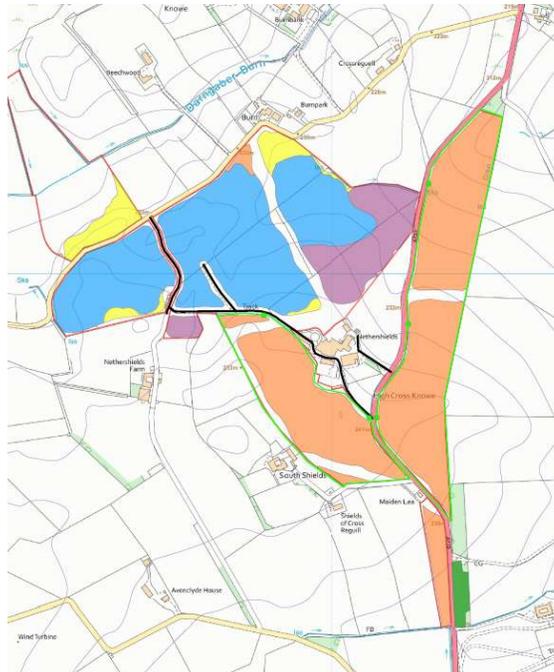
Consulting Engineers and Forensic Investigation Specialists

**WOODLAND CREATION SCHEME
EAST NETHERSHIELDS
A723
STRATHAVEN**

ROAD SAFETY REVIEW
(SPA Ref No: 5349)

Roads Authority: South Lanarkshire Council

Client: Tilhill Forestry



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DOCUMENT CONTROL

General

Project	Woodland Creation Scheme, East Nethershields, A723, Strathaven.
Client	Tilhill Forestry
Document Type	Road Safety Review
SPA Ref No	5349

Report Revisions

	Originator	Date	Reviewer	Date	Status
Draft –Rev 0	Murray Robison	11/10/2022	N/A	N/A	For Review
Draft –Rev 1	N/A	N/A	Kevin McMahon	12/10/2022	Convert to Final
Final – Rev 0	Murray Robison	12/10/2022	N/A	N/A	Issue to Client

1.0 PROJECT DETAILS

Report title:	Woodland Creation Scheme, East Nethershields, A723, Strathaven.
Date:	October 2022
Document reference and revision:	5439-SPA-RSR-A723 Strathaven-Final-Rev-0
Prepared by:	Stewart Paton Associates Limited
On behalf of	Tilhill Forestry

2.0 INTRODUCTION

- 2.1 The report has been prepared for South Lanarkshire Council as a Road Safety Review on how the visibility splays will be affected on the existing roads layout associated with a proposed area of woodland planting surrounding Nethershields Farm on the A723 Strathaven between Burn Road and the A723. The Review was on behalf of Tilhill Forestry and requested by Byron Braithwait. The Road Safety Review was carried out during October 2022.
- 2.2 The Road Safety Review Team membership was as follows:
- Murray Robison, MCIHT, MSoRSA
Director of Stewart Paton Associates Ltd., Consulting Engineers and Forensic Investigation Specialists
(Certificate of Competency in Road Safety Audit gained in February 2013)
- Kevin McMahon, BSc, MSc IEng FIHE, MCIHT, FSoRSA
Managing Director of Stewart Paton Associates Ltd., Consulting Engineers and Forensic Investigation Specialists
(Certificate of Competency in Road Safety Audit gained in August 2017)
- 2.3 The Road Safety Review Brief / Instructions was supplied by Byron Braithwaite. The Review Team was approved by Byron Braithwaite.
- 2.4 The Road Safety Review took place at the New Stevenston office of Stewart Paton Associates during October 2022. The Road Safety Review was undertaken in accordance with the Road Safety Review Brief / Instruction provided by Byron Braithwaite. The Road Safety Review comprised an examination of the documents provided, and these are listed in Annex 1. The documents consisted of a location drawing indicating the areas to be planted. The Review Team (Murray Robison assisted by Olivia Fitzgerald) visited the site of the proposed woodland creation on the morning of 11 October 2022 between 1030 and 1130. During the site visit the weather was dry and the existing road surface was dry. Traffic conditions were light.
- 2.5 The terms of reference of the Road Safety Review are generally as those as described in GG 119 for a Road Safety Audit. The Road Safety Review Team has examined and reported only on the road safety implications of the problem identified as presented and has not examined or verified the compliance of the designs to any other criteria.

- 2.6 All comments and recommendations are referenced to the design drawing and the locations have been indicated on plan included in the Annex 2. Where appropriate photographs have been included within the body of the report to illustrate issues identified.
- 2.7 The proposed woodland is to be created on land to the north of Strathaven and centred around Nethershields Farm. Some planting will take place to the east of the A723 with the remainder between the A723 and Burn Road. The review will concentrate on the effects of the woodland creation on the visibility splays at four existing access tracks. Three of the tracks adjoin the A723 while the fourth adjoins Burn Road.
- 2.8 The A723 is a single carriageway with one lane in either direction. It is subject to the national speed limit and is not provided with a system of lighting or footways. The A723 in the vicinity of the existing access tracks follows a series of bends where visibility is more than likely reduced due to the presence of verges and landscaping and as such is provided with a system of double white lining to prohibit overtaking manoeuvres.

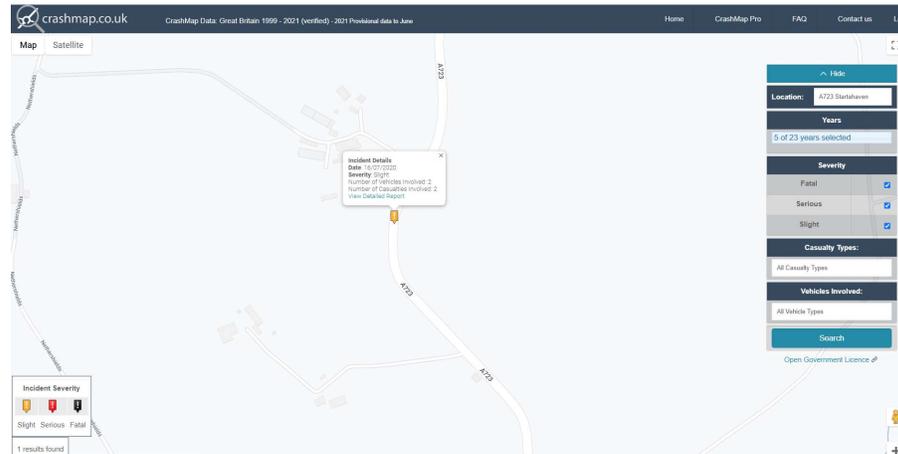
Note 1:

Any reference to a Chapter is a reference to a Chapter of the Traffic Signs Manual, reference to the Regulations is a reference to the Traffic Signs Regulations and General Directions 2016 and any reference to a Diagram (Diag) is a reference to a sign Diagram number in those Regulations. References to standards are those found in the Design Manual for Roads and Bridges.

3.0 ACCIDENT RECORD

3.1 The Review Team have consulted the Crashmap UK website. Between 2017 and 2021 on the A723 in the vicinity of the proposed woodland creation scheme there was 1 injury collision accident.

3.2 Accident Location



3.3 Accident Summary

3.3.1 This collision occurred on the 16 July 2020 at 0830 hours. At the time of the collision, it was daylight, and the weather was dry and fine without high winds. Visibility would have been good. The collision involved two vehicles and two slight injury casualties.

3.3.2 The description of the collision indicates that vehicle number 1, a car, was travelling north on a right-hand bend and was described as proceeding normally along the carriageway. Vehicle number 2, also a car, was travelling south on a left-hand bend and was also described as proceeding normally along the carriageway. Both vehicles sustained damage to the front.

3.3.3 The description of the collision and the damage to the vehicles would indicate that one of the vehicles may have been on the wrong side of the carriageway or has lost control while negotiating the series of bends. There is nothing to indicate that any of the existing junctions or visibility issues were a causation factor in the collision.

4.0 ITEMS ARISING FROM THIS REVIEW

4.1 LOCAL ALIGNMENT

4.1.1 PROBLEM

Location: Existing Junctions with A723 and Burn Road.

Drawing(s): East Nethersields Design.

Summary: Reduced visibility at junctions can result in an increase in a variety of accidents including fail to see, late braking and rear end shunts.

The three existing access junctions on the A723, namely Nethersields North, Nethersields South and South Shields are built to differing standards. All three junctions rely on visibility splays which cross adjacent fields. The presence of existing verges, hedges, fencing along with the vertical and horizontal alignment of the carriageway results in visibility splays which are more than likely less than the, 215m DMRB standard, which would normally be expected.

All three junctions lie on the outside of curves and accordingly the visibility splay may have to be constructed as a combination of the guidance outlined in CD123 'Geometric design of at-grade priority and signal-controlled junctions', Figure 3.9 and 3.10.

The access junction on Burn Road is located a straight section of carriageway although visibility is restricted due to the existing hedgerows and a crest to the east of the access.

Areas of verges identified when constructing the visibility splays will be required to be kept clear of tree planting and it may be necessary to prune existing hedgerows.

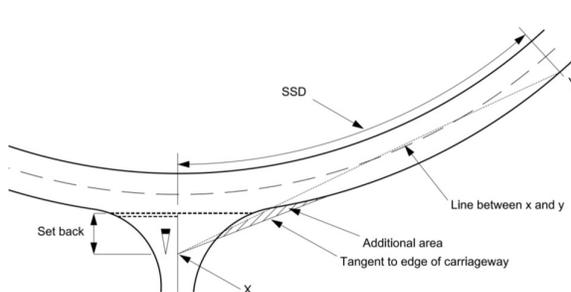


Fig 3.9

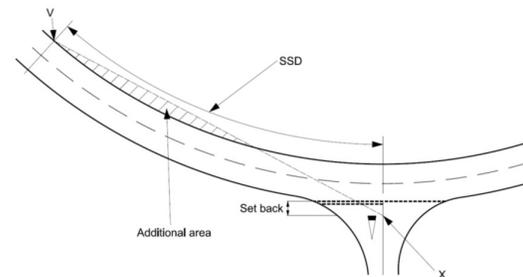


Fig 3.10

RECOMMENDATION

It is recommended that when designing the final tree line of the woodland creation scheme that all planting is kept clear of visibility splays. The guidance provided in DMRB, CD123 'Geometric design of at-grade priority and signal-controlled junctions' should be followed.

4.1.2 PROBLEM

Location: Burn Road.

Drawing(s): East Nethersields Design.

Summary: Reduced forward visibility can result in an increase in a variety of accidents including fail to see, late braking and rear end shunts.

Burn Road is a narrow carriageway and drivers have to negotiate a variety of bends, crest and sags. While forward visibility appears to be adequate in places there are areas where the roads contours and existing verges restrict the forward visibility. At Burn Farm there is a series of sharp bends where drivers need to take a view across the fields in order to observe approaching traffic. Trees planted in this area there will be greatly reduce visibility.

RECOMMENDATION

It is recommended that when designing the final tree line of the woodland creation scheme that tree planting in the area of Burn Farm be kept clear of the visibility splay across the fields to ensure that drivers in both directions have clear visibility to approaching traffic.



4.1.3 PROBLEM

Location: A723 and Burn Road.

Drawing(s): East Nethersields Design.

Summary: Reduced forward visibility can result in an increase in a variety of accidents including fail to see, late braking and rear end shunts.

The layout of both the A723 and Burn Road is that of bends , crests and sags with both roads being provided with verges and a mixture of differing fencing and hedgerows. These features can combine to restrict the forward visibility available.

In order to operate successfully adequate forward visibility at all points along a carriageway is essential. Forward visibility is the distance a driver needs to see ahead to stop safely to avoid an obstruction in the road. The minimum forward visibility required is equal to the minimum stopping sight distance.

The review team have been made aware that the woodland creation scheme tree line will be set at 5m from the existing carriageway. While this seems appropriate there may nonetheless be areas, similar to that outlined in problem 4.4.2 where the tree line may be required to be pushed further back in order to maintain visibility splays across bends.

RECOMMENDATION

It is recommended that when designing the final tree line of the woodland creation scheme that all planting is kept clear of visibility splays on the A723 and Burn Road to ensure that forward visibility is maintained at all times.

4.2 GENERAL

The Review Team have not identified any road safety issues relative to this section at this time.

4.3 JUNCTIONS

The Review Team have not identified any road safety issues relative to this section at this time. Issues regarding visibility have been discussed in other sections of the report.

4.4 WALKING, CYCLING AND HORSE RIDING

The Review Team have not identified any road safety issues relative to this section at this time.

4.5 TRAFFIC SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING

The Review Team have not identified any road safety issues relative to this section at this time.

4. REVIEW TEAM STATEMENT

We certify that this Review has been carried out generally in accordance with GG 119

REVIEW TEAM LEADER

Name: Murray Robison
MCIHT, MSoRSA
Position: Director

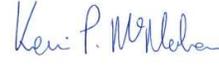
Signed: 
Dated: 12 October 2022

Organisation: Stewart Paton Associates Ltd
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REVIEW TEAM MEMBER

Name: Kevin McMahon
BSc, MSc IEng FIHE, MCIHT, FSoRSA
Position: Managing Director

Signed: 
Dated: 12 October 2022

Organisation: Stewart Paton Associates Ltd
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Annex 1 LIST OF PLANS AND DOCUMENTS

East Nethersields Design 15/09/2022

Annex 2 PROBLEM LOCATION PLAN

- Specific problem areas have been identified and referenced by the comment number in the text
- General issues covering multiple areas(4.4.3)have not been highlighted on this plan so as to avoid clutter and potential misinterpretation.

