

Road Safety Audit Report	
Document:	Form #359
Issue:	#5
Related to:	Procedure 061



# TERM CONTRACT FOR THE MANAGEMENT AND MAINTENANCE OF THE SCOTTISH TRUNK ROAD NETWORK

## NORTH WEST UNIT

### A9 B9161 MUNLOCHY JUNCTION PROHIBITION OF RIGHT TURNS (TEMPORARY WORKS)

#### STAGE: 1\_2

#### ROAD SAFETY AUDIT

#### SCHEME ID: 22-NW-0801-008

#### AUDIT REF NO: 005

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**CLIENT:**

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**PREPARED BY:**

BEAR Scotland Ltd.  
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Road Safety Audit Report	
Document:	Form #359
Issue:	#5
Related to:	Procedure 061



## Scheme Title: A9 B9161 MUNLOCHY JUNCTION PROHIBITION OF RIGHT TURNS (TEMPORARY WORKS)

### Road Safety Audit Stage: 1\_2

#### Contents Amendment Record

This report, reference 005, has been issued & amended as follows:

Issue	Revision	Description	Date	Signed
1	0	Draft Report	16/09/22	redacted 11(2)

#### Report Circulation Record

This report has been circulated, as follows:

Person	Organisation	No. of Copies	Issue / Revision	Date
Overseeing	Transport Scotland	1	1	20/09/22
File	BEAR Scotland	1	1	20/09/22

Road Safety Audit Report	
Document:	Form #359
Issue:	#5
Related to:	Procedure 061



	<b>Contents</b>	<b>Page</b>
1	Introduction	3
2	Problems Raised at this Stage 1_2 Road Safety Audit	5
3	Road Safety Audit Team Statement	10

### **Appendices**

- A List of Drawings and Documents Reviewed for the Road Safety Audit
- B Problem Location Plan

Road Safety Audit Report	
Document:	Form #359
Issue:	#5
Related to:	Procedure 061



## 1 INTRODUCTION

1.1 This report results from a Stage 1-2 Road Safety Audit carried out in accordance with GG 119 Road Safety Audit on the following scheme, A9 B9161 MUNLOCHY JUNCTION PROHIBITION OF RIGHT TURNS (TEMPORARY WORKS),, at the request of redacted 11(2) as representative of the Overseeing Organisation, Transport Scotland, who also approved the audit team and issued the Brief.

1.2 The audit comprised of a site visit and an examination of the documents provided by the Overseeing Organisation and listed in **Appendix A**.

1.3 The Audit Team membership approved by Transport Scotland (the Overseeing Organisation) for this audit was as follows:

Name redacted 11(2) Organisation BEAR Scotland Ltd  
(Audit Team Leader and author of The Road Safety Audit Report)

Certificate of Competency  (tick if applicable)

Name redacted 11(2) Organisation BEAR Scotland Ltd  
(Audit Team Member)

Certificate of Competency  (tick if applicable)

Name redacted 11(2) Organisation The Highland Council  
(Observer)

Certificate of Competency  (tick if applicable)

1.4 The audit took place at the offices of BEAR Scotland Ltd. during September 2022, and the site was visited on Wednesday 14th September 2022. Conditions at the time of the site visit were as detailed in Table 1 below.

Day	Date	Times	Light	Weather	Surface	Traffic	Pedestrians
Wednesday	14/09/22	12:00 – 14:30	Daylight	Sunny	Dry	Moderate	N/A

**Table 1: Site Conditions at Time of Visit**

Road Safety Audit Report	
Document:	Form #359
Issue:	#5
Related to:	Procedure 061



- 1.5 The team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the design to any other criteria.

### **Purpose of the Scheme**

- 1.6 The proposed works will involve the permanent removal of the right turn from the B9161 minor road to the A9 north. Due to the collision history at this junction this is to be done as soon as possible. In the first instance this will be done by the installation of temporary **barriers**, traffic cones, regulation and information signing on A-frames or existing poles, whilst the permanent layout can be designed and constructed. It is anticipated that the temporary measures will be there for up to 6 months. A separate audit for the permanent features will be undertaken in due course.

### **Strategic Decisions / Departures from Standard**

- 1.7 No strategic decisions or Departures from Standard were presented to the Audit Team as part of the audit process.

### **Response Report**

- 1.8 A copy of the signed RSA Response Report, containing the Road Safety Audit Decision Log, indicating the acceptance or otherwise of any problem and/or recommendation and agreed RSA actions should be issued to the RSA team by the Overseeing Organisation.

### **Previous Road Safety Audit Reports**

- 1.9 No previous Road Safety Audits have been carried out on this scheme.

Road Safety Audit Report	
Document:	Form #359
Issue:	#5
Related to:	Procedure 061



## 2 ITEMS RAISED AT THIS STAGE 1\_2 ROAD SAFETY AUDIT

### TRAFFIC SIGNS, CARRIAGEWAY MARKINGS, AND LIGHTING

#### 2.1 PROBLEM 2.1

Location: A9 / B9161 Junction

Summary: The proposed **barrier** system and traffic cones may not be visible during the hours of darkness.

Although street lit the proposed barrier system and traffic cones may not be visible during the hours of darkness particularly during winter months when they will become dirty increasing the likelihood of a vehicle collision.

#### RECOMMENDATION

It is recommended that the temporary set-up is inspected at regular intervals, cleaned as required and that steady amber (non-flashing) temporary traffic management lamps are provided.

#### 2.2 PROBLEM 2.2

Location: A9 / B9161 Junction

Summary: No proposed signage for the prohibition of the right turn.

Although there is a proposed keep left arrow to Diag 606 to be in the temporary island there is no proposed signage for the prohibition of the right turn. If a vehicle erroneously arrived at the junction intending to turn right there may be a temptation to complete the manoeuvre without the regulatory signage increasing the likelihood of conflict with northbound A9 traffic.

#### RECOMMENDATION

It is recommended that regulatory no right turn signage to Diag. 612 is provided. It is also recommended that "NO ENTRY" road markings are provided to the right of the island

Road Safety Audit Report	
Document:	Form #359
Issue:	#5
Related to:	Procedure 061



to ensure road users do not travel down the wrong side of the island to access the central reserve gap.

### 2.3 PROBLEM 2.3

Location: A832 East of Munlochry.

Summary: Proposed sign to be located on high and uneven verge.

The proposed information sign mounted on a high-level A-frame is to be located on a 400mm raised uneven verge. Although to be sandbagged there is a risk that it could fall into the live traffic lane increasing the likelihood of injury to the occupants of a passing vehicle, considering the temporary arrangement could last up to six months.

### RECOMMENDATION

It is recommended the sign is mounted on a passively safe post arrangement.



**PHOTO 1:** Looking west along verge towards proposed sign location.



Road Safety Audit Report	
Document:	Form #359
Issue:	#5
Related to:	Procedure 061



## 2.4 PROBLEM 2.4

Location: B9161 East of war memorial.

Summary: Proposed sign to be located on narrow and uneven verge.

The proposed information sign mounted on a high-level A-frame is to be located on a raised uneven verge. Although to be sandbagged there is a risk that it could fall into the live traffic lane increasing the likelihood of injury to the occupants of a passing vehicle, considering the temporary arrange could last up to six months.

### RECOMMENDATION

It is recommended the sign is mounted on a passively safe post arrangement and any tree branches that obscure clear sight to the sign are removed.



**PHOTO 2** : Looking north on the B9161 from proposed sign location.



Road Safety Audit Report	
Document:	Form #359
Issue:	#5
Related to:	Procedure 061



## 2.5 PROBLEM 2.5

Location: East of the B9161 / U2723 Toll House junction.

Summary: Proposed sign to be located on narrow and high verge.

The proposed information sign mounted on a high-level A-frame is to be located on a raised uneven verge. Although to be sandbagged there is a risk that it could fall into the live traffic lane increasing the likelihood of injury to the occupants of a passing vehicle, considering the temporary arrange could last up to six months. Clear sight distance to the proposed sign will also be severely restricted due to the profile of the verge and fence line.

### RECOMMENDATION

It is recommended the sign is located on the offside of the carriageway where there is a wide and even verge.



**PHOTO 3:** Looking north on the B9161 from proposed sign location.

Road Safety Audit Report	
Document:	Form #359
Issue:	#5
Related to:	Procedure 061



## 2.6 PROBLEM 2.6

Location: B9161.

Summary: Information signs refer to the B9161 but there are no route number signs.

Information signs refer to the B9161 but there are no route number signs to inform road users that they are on the B9161 increasing the likelihood of road users arriving at the A9 / B9161 Munloch junction and making the injudicious right turn.

### RECOMMENDATION

It is recommended that route number signs are provided on the B9161, similar to the signs proposed on the A832.

## 2.7 PROBLEM 2.7

Location: U2723 East of Artafallie junction.

Summary: The proposed directional signing on the U2723 east of Artafallie junction includes a left turn back to the A9.

The proposed advance directional signing (ADS) on the U2723 east of Artafallie junction includes a left turn back to the A9, resulting in the same right turn manoeuvre that is to be prohibited at Munloch, increasing the likelihood of conflict with A9 traffic at Artafallie junction.

### RECOMMENDATION

It is recommended that the left turn to the A9 is not signed.

Road Safety Audit Report	
Document:	Form #359
Issue:	#5
Related to:	Procedure 061



### 3 AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with GG 119 "Road Safety Audit".

#### AUDIT TEAM LEADER

Name: redacted 11(2) Signed redacted 11(2)

Position: Road Safety Engineer Date 16/09/22

Organisation: BEAR Scotland Ltd

Address: Bridgepoint House  
Longman Drive,  
Inverness,  
IV1 1SU

#### AUDIT TEAM MEMBER

Name: redacted 11(2) Signed redacted 11(2)

Position: Road Safety Engineer Date 16/09/22

Organisation: BEAR Scotland Ltd

Address: Bear House  
Inveralmond Road,  
Perth,  
PH1 3TW

Others Involved: redacted 11(2), Highland Council - Observer

Road Safety Audit Report	
Document:	Form #359
Issue:	#5
Related to:	Procedure 061



## APPENDIX A

### Documents Forming the Audit Brief

#### Drawings

Drawing No.	Revision No.	Drawing Title	Date
22-NW-0801-008/LOC	0	A9 Location plan	Aug 22
22-NW-0801-008/TEMP01	0	A9 Temporary works	Aug 22
22-NW-0801-008/TEMP02	0	A9 Temporary works – Advance Signing	Aug 22
22-NW-0801-008/TEMP03	0	A9 Temporary works – Road markings	Aug 22

#### Documents

Report Reference	Revision No.	Report Title	Date
		RSA Brief	06/09/2022

Road Safety Audit Report	
Document:	Form #359
Issue:	#5
Related to:	Procedure 061



**APPENDIX B**  
**Problem Location Plan**

Road Safety Audit Report	
Document:	Form #359
Issue:	#5
Related to:	Procedure 061

