home safe and well

**CASE STUDY**

**AJJV | Bringing *Home Safe and Well* principles to technical advice projects – Example 1: Horse riding design requirements**

# Introduction

The overarching goal of Home Safe and Well is that "No one should be harmed when travelling or working on the strategic road network". The objective of this case study is to demonstrate how the principles of Home Safe and Well can be brought to life in technical advice projects, supporting National Highways safe decision making and the safety of road users.

## Overview

Horse riders are a very small proportion of the road user group and yet this often means they have been marginalised in the design process.

Road rage, speeding, close passing distance and seasonal factors play a role on the quantity and severity of conflics involving horses on the strategic road network.

The project aims to examine the current DMRB design requirements for horse-riding facilities and seek ways to improve these requirements for the safety and comfort of horse riders on the strategic road network.

## Challenges

- To consolidate H&S knowledge in the subject matter, which was otherwise disperse across a number of diverse sources, including scientific articles and safety standards.
- To elevate our H&S practice and bring the unique perspective of horse riders to our thought processes.
- To interpret high level incident data and enhance its meaning for the purpose of safe design.

# Action Taken

Throughout the life of the project, AJJV were able to enhance their technical work by:

- Bringing road safety specialists who were regular horse riders to the project, with the objective of bringing their unique perspective into the solutions
- Considering equine physiology to improve understanding of how design might affect horses
- Carrying out site visits and proactively consulting with national user groups and local horse riders to better understand how the design of facilities can positively impact the safety of these users

# Results

The original scope would have delivered the project successfully. However, as the project progressed we have been able to include significant extra areas of Literature Review. As a result we have been able to consolidate an otherwise disperse body of knowledge."

With respect to the tangible benefits for National Highways users, PM Rob Hunt explained that *"the primary tangible benefit for National Highways users is a set of design requirements that provide a safer experience for horse riders. A second tangible benefit that has been realised is excellent relations with the main stakeholder, the British Horse Society, which is expected to deliver future benefits for ongoing development of these design requirements".*

These users also have the right to expect to be able to finish their journey on the strategic road network and so our work is supporting them to be able to get Home Safe and Well on future journeys.

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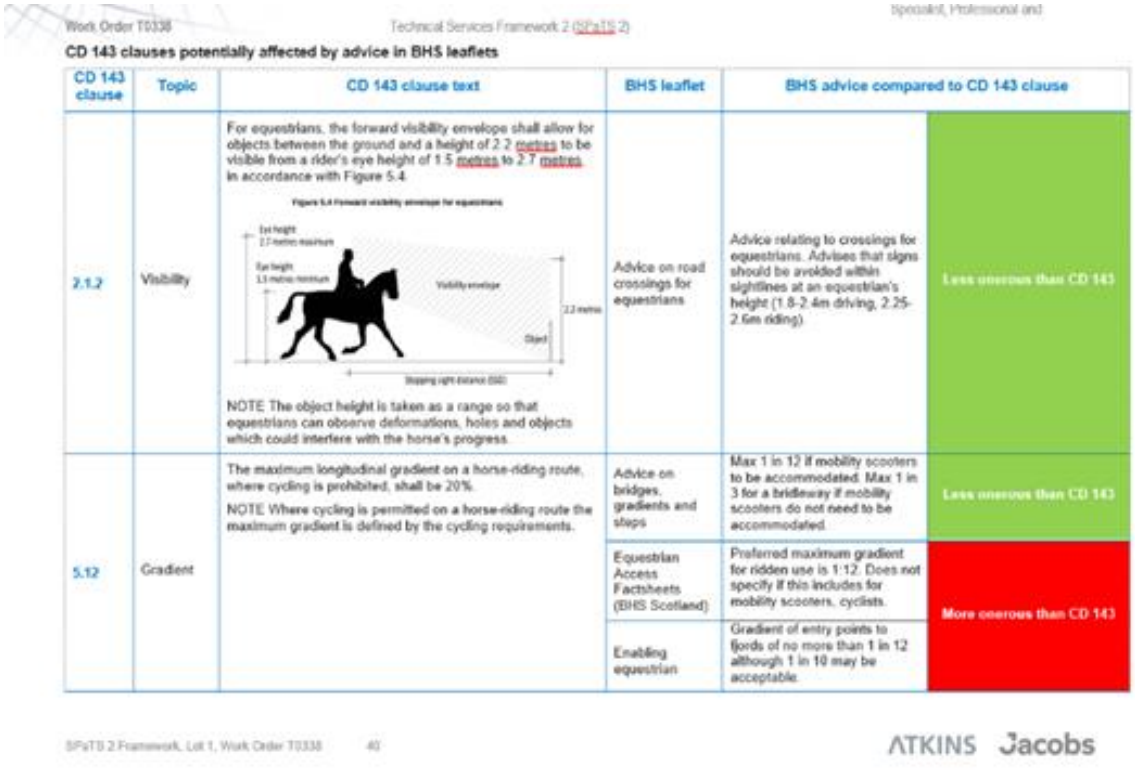
home safe and well

# Images





**CD 143 clauses potentially affected by advice in BHS leaflets**

| CD 143 clause | Topic | CD 143 clause text | BHS leaflet | BHS advice compared to CD 143 clause | |
|---|---|---|---|---|---|
| 2.1.2 | Visibility | For equestrians, the forward visibility envelope shall allow for objects between the ground and a height of 2.2 metres to be visible from a rider's eye height of 1.5 metres to 2.7 metres in accordance with Figure 5.4.<br>Figure 5.4 Forward visibility envelope for equestrians<br>NOTE The object height is taken as a range so that equestrians can observe deformations, holes and objects which could interfere with the horse's progress. | Advice on road crossings for equestrians | Advice relating to crossings for equestrians. Advises that signs should be avoided within sightlines at an equestrian's height (1.8-2.4m driving, 2.25-2.6m riding) | Less onerous than CD 143 |
| 5.12 | Gradient | The maximum longitudinal gradient on a horse-riding route, where cycling is prohibited, shall be 20%.<br>NOTE Where cycling is permitted on a horse-riding route the maximum gradient is defined by the cycling requirements. | Advice on bridges, gradients and steps | Max 1 in 12 if mobility scooters to be accommodated. Max 1 in 3 for a bridleway if mobility scooters do not need to be accommodated. | Less onerous than CD 143 |
| | | | Equestrian Access Factsheets (BHS Scotland) | Preferred maximum gradient for ridden use is 1:12. Does not specify if this includes for mobility scooters, cyclists. | More onerous than CD 143 |
| | | | Enabling equestrian | Gradient of entry points to fjords of no more than 1 in 12 although 1 in 10 may be acceptable. | |