Appendix 14.1

Methodology for producing the theoretical Zone of Visual Influence

Contents

1 Methodology for producing the theoretical Zone of Visual Influence

1.1 Introduction

1.1.1   The theoretical Zone of Visual Influence (tZVI) shows the likely (or theoretical) extent of visibility of the Proposed Scheme. This is also referred to as a Visual Envelope.

1.2 Data

1.2.1   The base data used to produce the tZVI is Ordnance Survey Panorama data which is based on a 50m grid. The digital terrain model (DTM) is based on a bare-earth model; it does not feature buildings, vegetation or other boundaries which may have a noticeable effect on the visibility of a development. This means that the theoretical visibility results are based on a worst case scenario.

1.2.2   A height of 1.6m was added to the (DTM) to illustrate the eye level of a person.

1.3 The Proposed Scheme

1.3.1   To produce the tZVI, the Proposed Scheme needs to be to Ordnance Survey coordinates and have a 'z' value. For the A9, all elements of the Proposed Scheme were considered, e.g. the road, earthworks, tracks and junctions. A height of 4.5m was added to the z values of each element where a vehicle may be present.

1.3.2   It is important to check the z values prior to running the tZVI and where necessary remove any anomalies.

1.4 The Output

1.4.1   The results are mapped as colour shading and are illustrated on Ordnance Survey data. This can then be viewed within the surrounding context, allowing the information to be properly understood and analysed.

1.4.2   The scale of the tZVI is dictated by the extent of the Proposed Scheme. Due to the linear nature and extent of the Proposed Scheme a 10km buffer was used; therefore, the results are shown on the 250,000 scale Raster Data. The tZVI was then used to inform site visits to decipher where the Proposed Scheme is actually visible and to inform where representative viewpoints are taken.

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