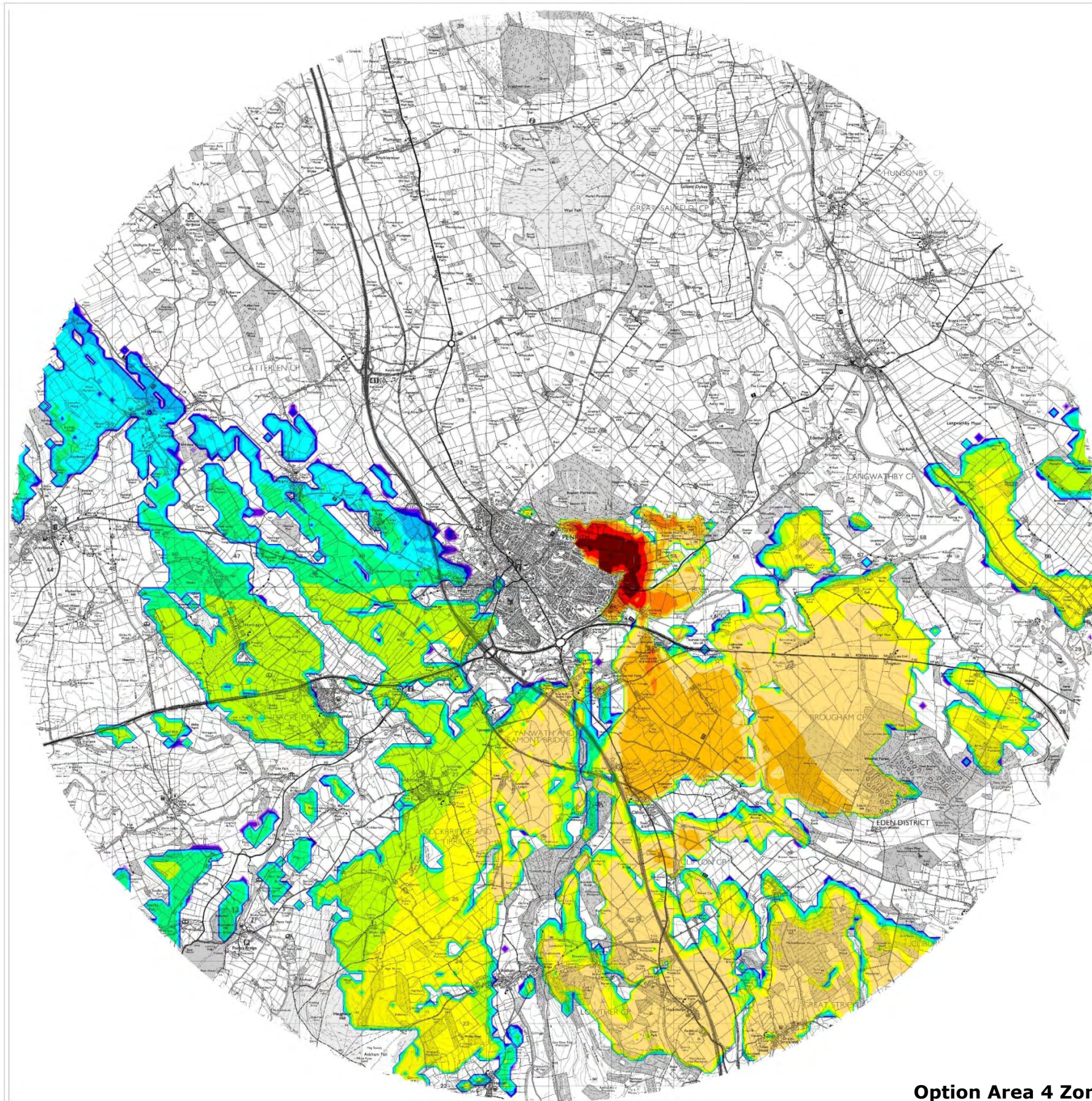


Option Area 4 Illustrative Site Photos – site extent shaded red.





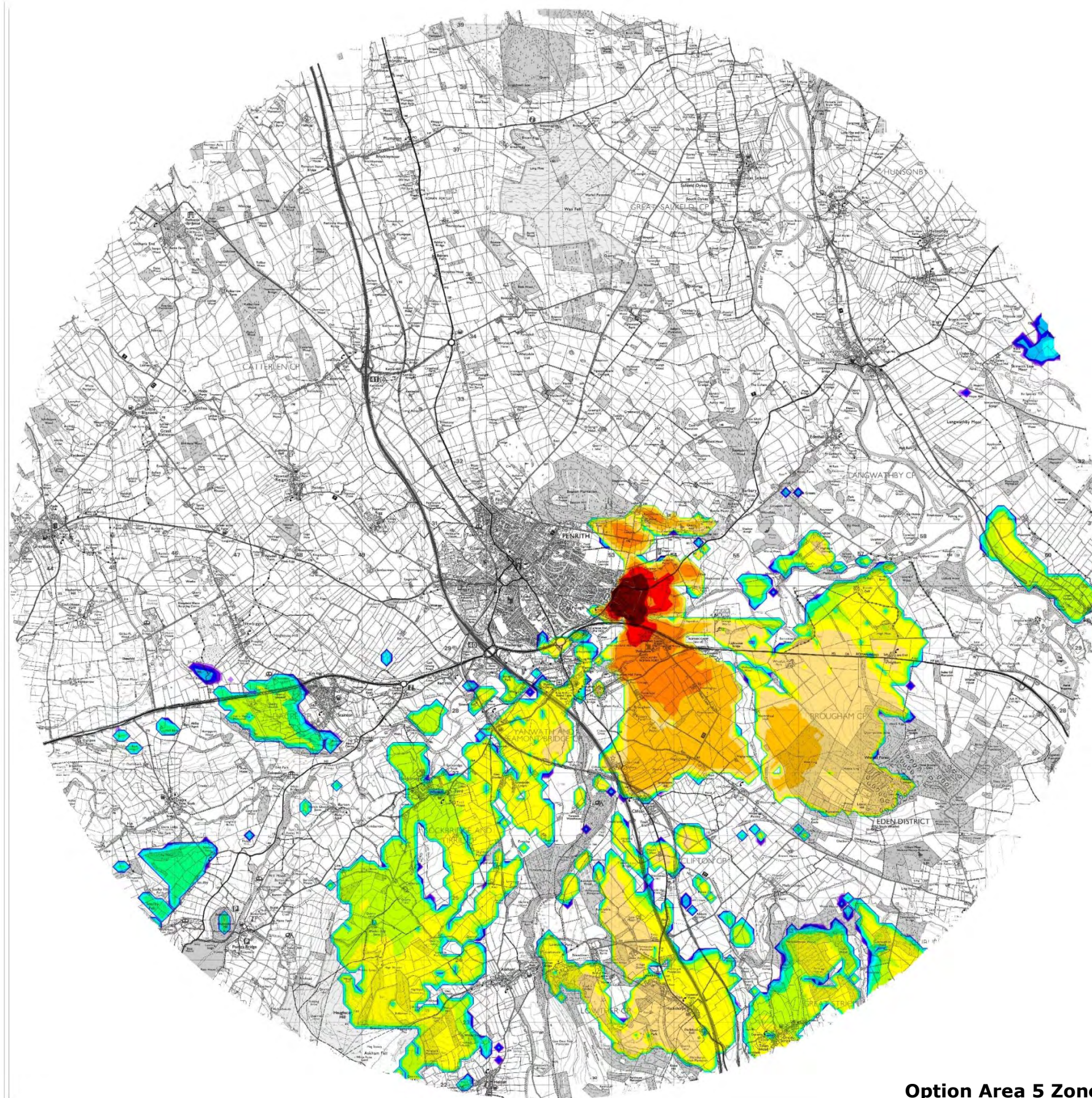
LEGEND

- less than 4.096 degrees visible
- less than 2.048 degrees visible
- less than 1.024 degrees visible
- less than 0.512 degrees visible
- less than 0.256 degrees visible
- less than 0.128 degrees visible
- less than 0.064 degrees visible
- less than 0.032 degrees visible
- less than 0.016 degrees visible
- less than 0.008 degrees visible
- less than 0.004 degrees visible
- less than 0.002 degrees visible
- less than 0.001 degrees visible

Option Area 4 Zone of Theoretical Visibility Mapping

Option Area 5 Illustrative Site Photo – site extent shaded red.





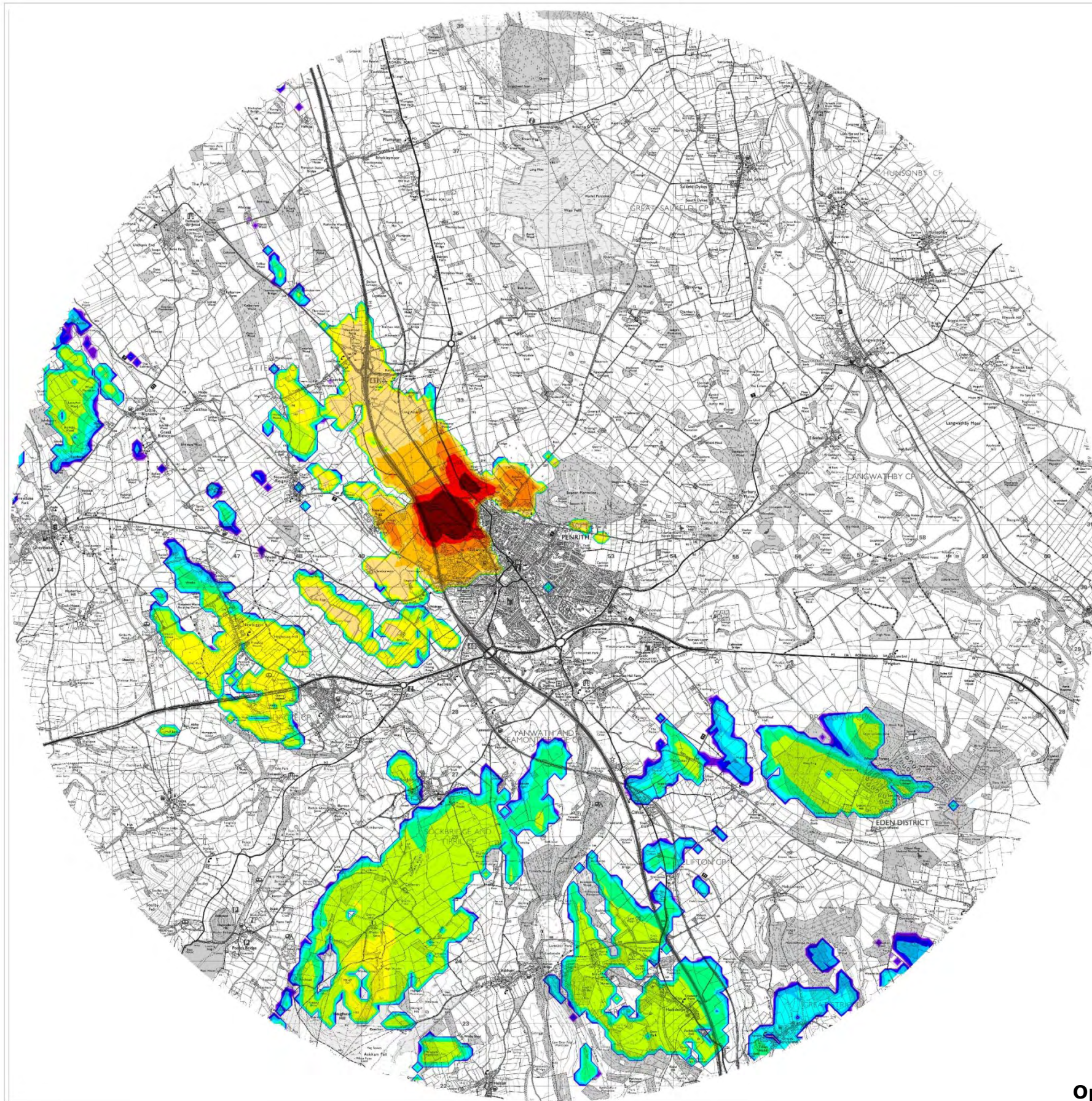
LEGEND

- less than 4.096 degrees visible
- less than 2.048 degrees visible
- less than 1.024 degrees visible
- less than 0.512 degrees visible
- less than 0.256 degrees visible
- less than 0.128 degrees visible
- less than 0.064 degrees visible
- less than 0.032 degrees visible
- less than 0.016 degrees visible
- less than 0.008 degrees visible
- less than 0.004 degrees visible
- less than 0.002 degrees visible
- less than 0.001 degrees visible

Option Area 5 Zone of Theoretical Visibility Mapping

Option Area 6 Illustrative Site Photo – site extent shaded red (front layer).





LEGEND

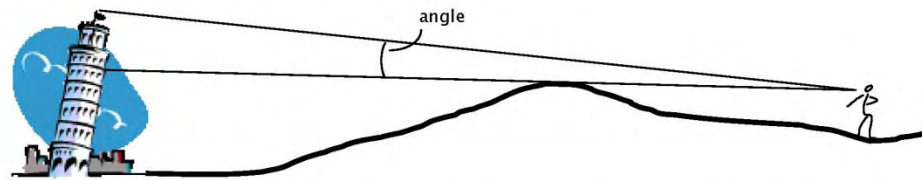
- less than 4.096 degrees visible
- less than 2.048 degrees visible
- less than 1.024 degrees visible
- less than 0.512 degrees visible
- less than 0.256 degrees visible
- less than 0.128 degrees visible
- less than 0.064 degrees visible
- less than 0.032 degrees visible
- less than 0.016 degrees visible
- less than 0.008 degrees visible
- less than 0.004 degrees visible
- less than 0.002 degrees visible
- less than 0.001 degrees visible

Option Area 6 Zone of Theoretical Visibility Mapping

**ZTV (Zones of Theoretical Visibility)
Subtended Angle Analysis**

The visibility map shows the computer model prediction of the relative visibility of proposed site features using digital terrain data (Data typically used is OS Landform 'Profile' contours data set).

The shaded areas represent the theoretical extents of visibility to the observer's eye, assumed to be 1.7m above existing ground level. During analysis, a suitable grid interval is selected for the study area in question and the visibility calculated for each grid location (usually between 100m and 200m spacing). For any one grid location, this is expressed as number which is the angle of visibility that the target takes up in the vertical field of view of the observer, as subtended by the highest and lowest points on the building/features visible, taking account of existing landform (and, if so indicated, nominal heights for surrounding buildings and existing woodland areas). The result for each grid square is shaded with a colour according to the value. Therefore the same colours in plan represent areas with relatively similar magnitudes of theoretical visibility.



A low angle result may be achieved from locations where the target is partially screened by landform as in the diagram above, or where the observer sees the whole target but from a far distance. In both cases, the theoretical impact is similar because they represent the same proportion of the observer's vertical field of view. Conversely, a high value for the subtended angle results if the observer sees a large proportion of the height of the target or is at short distance. Where the analysis is carried out for landform of a target area only (rather than buildings/structures with a height), the angle produced refers to the difference between visible high and low points on the ground with aspect facing the observer.

Interpreting what each colour actually means: The colours group ranges of angles as shown in the left column of the table below. The values in the columns to the right of this indicate what this means in terms of the perceived actual height which is visible to the observer at the stated distance from the target.

Apparent visible height (in metres) of a feature observed from different distances										
Angle (degrees)	maximum target hgt (m)	Distance from target (metres)								
	8	1000	2000	3000	4000	5000	6000	7000	8000	9000
less than 0.001	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
less than 0.002	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3
less than 0.004	0.1	0.1	0.2	0.3	0.3	0.4	0.5	0.6	0.6	0.6
less than 0.008	0.1	0.3	0.4	0.6	0.7	0.8	1.0	1.1	1.3	1.3
less than 0.016	0.3	0.6	0.8	1.1	1.4	1.7	2.0	2.2	2.5	2.5
less than 0.032	0.6	1.1	1.7	2.2	2.8	3.4	3.9	4.5	5.0	5.0
less than 0.064	1.1	2.2	3.4	4.5	5.6	6.7	7.8	100%	100%	100%
less than 0.128	2.2	4.5	6.7	100%	100%	100%	100%	100%	100%	100%
less than 0.256	4.5	100%	100%	100%	100%	100%	100%	100%	100%	100%
less than 0.512	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
less than 1.024	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
less than 2.048	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
less than 4.096	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
above 4.096	-	-	-	-	-	-	-	-	-	-

less than 1.7m visible
 more than 1.7m visible

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