

## Accurately evaluate proposed OLE structure obscurations

# Signal Immunisation for Electrification Projects



- Assess obscurations from multiple virtual items in the office
- Basic height, offset & point to point measurements
- Chainage display and Overlay grid for distance assessment
- Screen Capture facility with notes superimposed for input to SSF's
- Based on the G-RASTx toolset with all the same functionality
- An efficient and accurate method of viewing several structures at once
- Ideal for Grip 4 & 5 Signal Sighting

Based on our G-RASTx HD system, Gioconda can accurately display proposed OLE and other infrastructure for Signal Immunisation assessment. This is the ideal solution for checking proposed electrification of existing lines where the current signalling is to be retained or new signals & signage is proposed.

Where multiple new structures are being installed, a combined video/virtual reality solution is the best way to achieve an accurate view of the obscuration of an existing signal. The Gioconda system has the added advantage of being fully desk based, removing the requirement for costly site visits by the design team and Signal Sighting Committee.

# Gioconda's Signal Immunisation process

After obtaining the video footage either by filming ourselves or supplied by others Gioconda will correlate the video to the specified chainage - schemeplan or otherwise, and supply the runs in our Route Assessment module which aids the whole railway design process – *see separate leaflet for full details.*

Once a draft schemeplan is produced along with an OLE Plan layout, Gioconda will take this information and superimpose the proposed OLE and other assets onto the video source thus producing an augmented view of the proposed railway.

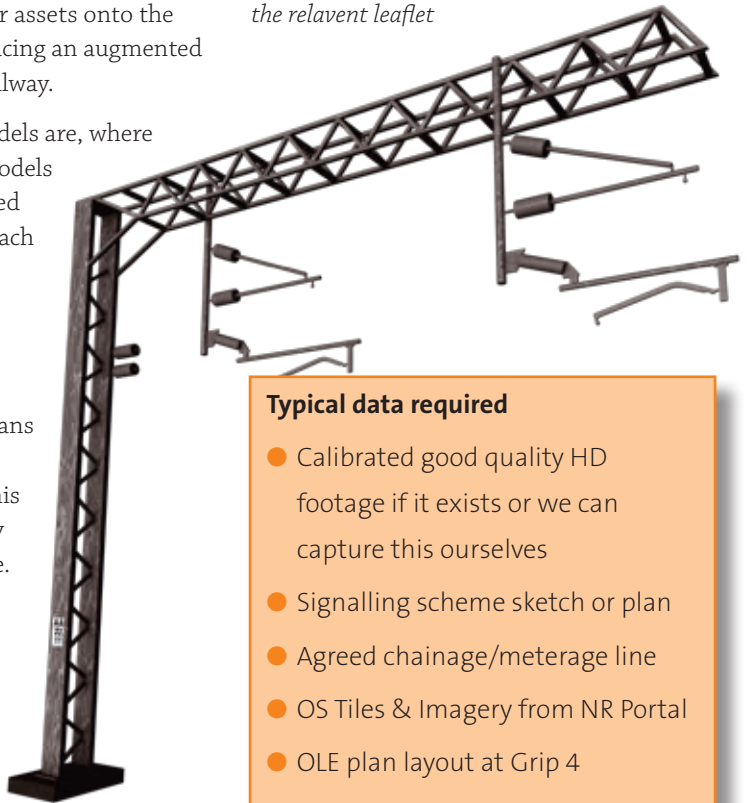
**3D OLE** – Our OLE models are, where possible, accurate 3D models of the OLE type proposed and can be bespoke to each project.

Gioconda suggests that the design team use the G-RASTx as an aid to internal proofing by means of a workshop or IDC prior to going to SSC; this process can significantly reduce iterations & time.

**Real-Time editing** – either as part of the proofing or during the SSC session a trained power-user can move and alter the OLE positions and content

using our 3D application. 3D OLE can be swapped for alternative structures allowing for optioneering and removal of signal obscurations.

Signal Immunisation is presented within the G-RASTx software which includes the ability to record obscurations accurately by using the video playback and automatically create the Obscuration Diagram in the Signal Sighting Form. *For more information on the G-RASTx Process please refer to the relevant leaflet*



## Typical data required

- Calibrated good quality HD footage if it exists or we can capture this ourselves
- Signalling scheme sketch or plan
- Agreed chainage/meterage line
- OS Tiles & Imagery from NR Portal
- OLE plan layout at Grip 4
- OLE detailed X-sections at Grip 5