

DDMS for Highways for ArcGIS

REAL-TIME VISUAL PROJECT TRACKING

The DDMS solution from MGISS is an out-of-the-box solution for CS 551 & CD 535 compliant DDMS Drainage surveys. The solution provides standardised templates within ArcGIS Online and Esri Field Apps (ArcGIS Field Maps and Survey123) for all DDMS surveys, allowing contractors to easily locate existing assets, capture new assets, and improve the overall quality of the asset repository, ensuring all data captured conforms to CS 551 & CD 535 standard.

The DDMS solution allows contractors to upload existing schemes extracted from DDMS as part of the roundtripping process. The assets are uploaded into ArcGIS Online utilising a specifically designed toolbox to ArcGIS Pro. The scheme survey is then undertaken using ArcGIS and with bespoke attribute forms in Survey 123 designed to meet the roundtripping and CS 551 & CD 535 specifications.

The preconfigured forms allow the onsite inspector to update the position of an existing asset and complete a new inspection record to the CS 551 & CD 535. This is verified for its correct location and then updated. Any asset found onsite which was not part of the existing scheme dataset can also be captured to centimetre-level accuracy. The solution also allows the inspector to capture up to six photographs of each asset and a technical diagram of the inside of the asset when required. Upon completion of the scheme, by utilising the DDMS Solution Toolbox, the scheme is downloaded from ArcGIS Online into a shapefile using the same toolbox. The completed asset survey can then be loaded into WinCan VX for a final consolidation with any new CCTV survey undertaken of the linear assets at the same time, followed by an upload to DDMS to complete the full round-tripping process.

Integration

Fully integrated with MGISS positioning solutions, GNSS metadata is captured for every surveyed asset which provides a full report of the horizontal and vertical position of each point asset. This metadata is transformed utilising the MGISS Z-Transform Solution, which transforms GNSS horizontal coordinates captured in ETRS89 to the British National Grid utilising the OSTN15 transformation and vertical coordinates from the GRS89 to Ordnance Datum Newlyn using OSGM15 geoid model. By utilising Field Maps for ArcGIS, accuracy quality settings are configured with the app to ensure positions within the 1-3cm range are only captured as per CS 551 & CD 535 standard.

KEY FEATURES

- Out-of-the-box solution fully compliant with CS 551 & CD 535 Drainage standard.
- Out-of-the-box data model and supported database formats.
- Fully integrated into the leading GIS platform ArcGIS Online and ArcGIS Pro.
- Supports centimetre-level accurate positioning for all assets per CS 551 Drainage standard.
- Increases productivity of inspectors by automating the asset capture process.
- Removes the need to revisit and re-survey assets.

TECHNICAL NOTES AND REQUIREMENTS

- ArcGIS Pro Basic Licence.
- ArcGIS Online Creator Licence (For administration and setup purposes).
- ArcGIS Online Field Worker Licence (For field asset location, capture and inspection).
- RTK GNSS Receiver (For capture requirements for CS 551).

INSTALLATION

Please see instructions on www.locationtoinsight.com

