From drone data to usable site intelligence

A living, up-to-date picture of every site — drone and survey captures turned into early warning of change before it becomes failure.

An image is a starting point

A clear aerial photograph can make a difficult site easier to understand. It can show terrain, access and visible conditions from a useful viewpoint. Yet the image alone does not explain every engineering mechanism, establish a design value or demonstrate that a structure is safe. The question is how to turn an observation into information that is fit for a decision.

Digital Eye turns satellite, drone, LiDAR, camera, thermal and photogrammetry captures into information tied to a place and a time. The result is a living, up-to-date picture of the site, rather than a collection of impressive images without a clear use.

Choose the question before the capture

Infrastructure inspection, construction progress, geohazard observation, environmental work and digital twins each ask something different of the data. A progress record, a terrain model and a condition observation are only as useful as the task they serve.

TEICO Overseas and Marmol Integrated bring engineering, survey, inspection and field-delivery experience, so each capture starts from a clear question about the actual site and assignment.

Locate and align the observation

Digital Eye turns drone and survey captures into located, comparable site records. A photograph or point cloud becomes far more useful when it belongs to a known part of the site and sits alongside the asset information for that place.

Repeat surveys show real change over time. Comparing the same place across visits separates genuine movement of the ground or the asset from differences in light, angle or season.

Add the project's engineering context

A digital twin is more than a survey at one point in time. Geometry, observations, sensor history, inspection information and engineering models together build an evolving record of a place that the whole project team can use.

For slopes, terrain, weather, drainage, deformation, geology and engineering history all matter. Satellite or InSAR observations, repeat surveys and ground instruments each add to the picture. Observed movement does not by itself establish a factor of safety; it points engineers to the areas and questions that deserve review.

Bring the evidence into the workflow

Construck's product and project work shows where the information is used: product selection, construction records, inspection and maintenance. Construck Project Suite gives project teams professional-grade slope and drainage assessments, faster, with professional review deciding what the evidence means for each application.

AI assistance helps organise the material, find related records and highlight gaps. The original observation, its location and its time stay identifiable, so the receiving engineer can always see what an interpretation is based on.

Distinguish site intelligence from machine control

Digital Eye will support TEICON's site operations — coordinated machines building roads faster and more safely, under human direction.

Understanding a site and authorising equipment to work in it remain separate decisions, and people stay in charge of both.

Usable site intelligence starts with a clear question and ends with a better decision. The technology contributes most when every observation makes that decision, and the evidence behind it, clearer.