AERIAL SURVEY OF INDUSTRIAL UNIT

HUVMiR

About us

HUVIAiR Technologies is a drone data based solutions company.

We expertise in providing solutions for the survey, construction, infrastructure, renewable energy and natural resource management sectors. We have a deep understanding of UAVs, sensors, photogrammetry, GIS mapping, surveying techniques, image processing, data analytics and software programming.

Our services include consulting, training, and drone data visualization and management services to individuals, corporates, governments and not-for-profits working on projects in these sectors.

Client Requirement

HUVIAiR was approached by the client to produce the following outputs -

- Top view image of the 7 acre industrial unit
- Survey map with all the industrial sheds and other buildings marked out

Mapping Process

A team of two HUVIAiR members went to site with a drone. The drone flight plan was pre-programmed based on the site boundary coordinates obtained at site. The total time spent at site was two hours, which included 25 minutes of drone flying time to map about 10 acres of land (the drone mapped slightly outside the boundary extents to ensure everything was covered).

The drone flew at a 70 meter altitude along the following grid and the camera took pictures to ensure 85% overlap between images in both directions. A total of 220 images we captured.

Output Descriptions

Orthomosaic Map

The orthomosaic map is a top view 2D true colour and scale representation of the property. Measurements like distances, areas and volumes (volume only on our system, not on autocad) can be performed on the map. The orthomosaic can be overlaid on google earth as well.

- The resolution of the orthomosaic is 2.3 cm/px
- The relative accuracy of the orthomosaic is within a few centimeters (i.e. the distances between the points on the map are highly accurate)

Orthomosaic map overlaid on Google Earth

Zooming in

Survey Map

The orthomosaic is converted into a survey map, with the boundaries and features marked and measured.