



Condo Tower Honolulu, Hawaii



PROJECT HIGHLIGHTS

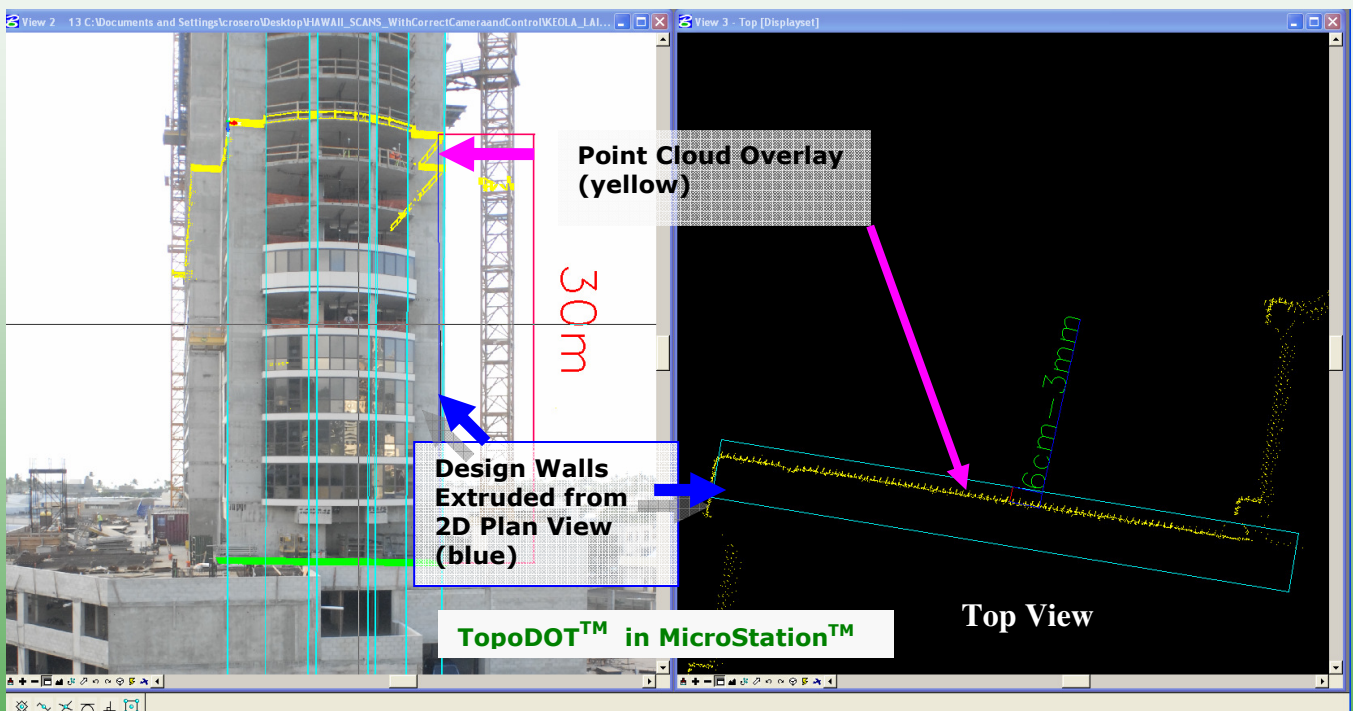
- Detailed assessment of façade deviation from plan over entire building
- Quickly resolved months of construction related questions as to structural deviation
- One day field time
- Lower cost / higher quality deliverable over conventional survey

Project: Tower Construction Analysis
Dates: Jan 1/29/07
Size: Single multi-story tower
Type: Construction Analysis

Project Manager: Jim Van Rens
Project Engineer: Jennifer Triana
Project Team Partner: Sam O. Hirota, Inc.

Project Summary:

Certainty 3D, LLC (C3D) applied 3D imaging technology to assess construction structures deviation from plan drawings. The Condo Tower was 10 stories tall. During construction, questions arose as to possible deviations from plan. C3D and Sam O. Hirota placed control and 3D image data in building coordinate frame. 3D image data was acquired from the roof of another building across the street in less than one day. 2D construction drawings and 3D image data were brought into MicroStation™. 2D wall elements were extruded vertically and compared with actual 3D image data, point cloud and calibrated images. Cross section point cloud views are easily selected and compared to extruded wall elements. Deviations from design were quickly identified and quantified at any location.



Deliverable Summary

- Data processed using Certainty 3D's TopoDOT™ application in MicroStation™
- All 3D image data is traceable back to control network survey reference in building coordinates
- TopoDOT™ generated model delivered in MicroStation™ and AutoCAD™ formats