Going Digital with Drone Solution

- Nomination to IPLOCA New Technology Award

Drone Airware Solution – Pipeline Construction

- Industry specific analytics for Pipeline Industries

PLAN: Cloud based enterprise software for planning & managing operations

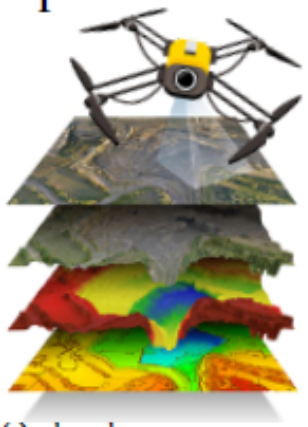
FLY: Easy to use operator software compatible with industry leading multi rotor and fixed wing drones

PLAN: Powerful tools and pipeline industry specific modules for analysis and reporting for pipeline construction

Drone Airware Solution – Pipeline Construction

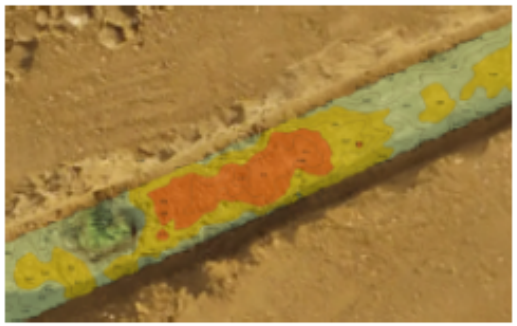
- Modeling and analyzing work environments in order to optimize PRODUCTIVITY and ensure flawless SAFETY

Geospatial Data



- Orthophoto
- DSM
- Point Cloud
- Contour Lines

Analytics



- Row Control
- Trench Control
- Bedding Control
- Etc…

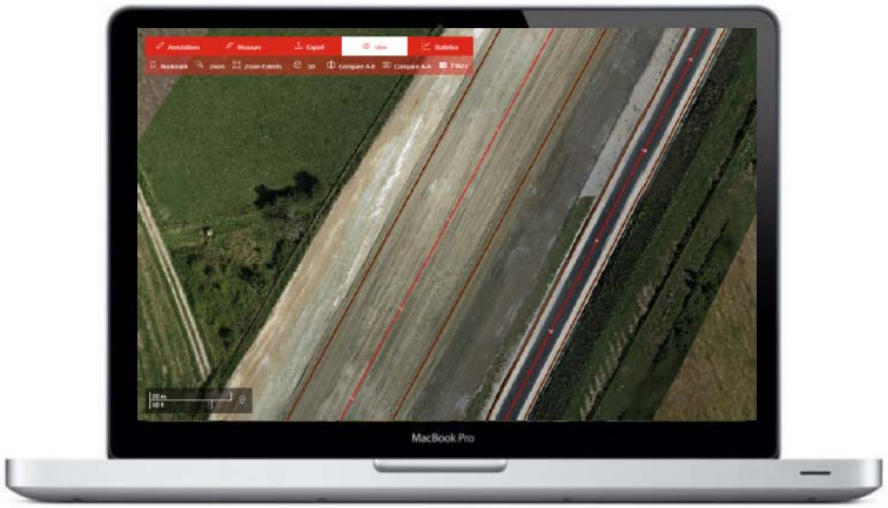
QS reports

- Qty Trench Opened
- Qty Bedding
- Qty pipeline lowered
- Etc…

Drone Airware Solution – Pipeline Construction

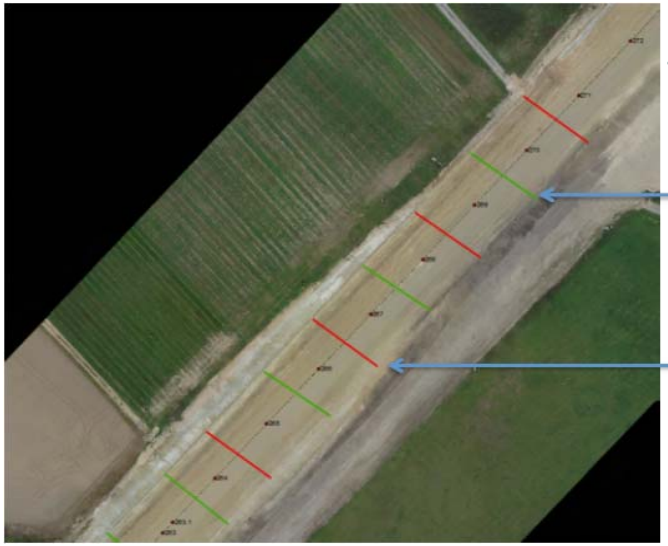
Project Design Import

- Import all the layers of the project into a cloud platform available anywhere, anytime, from any connected device



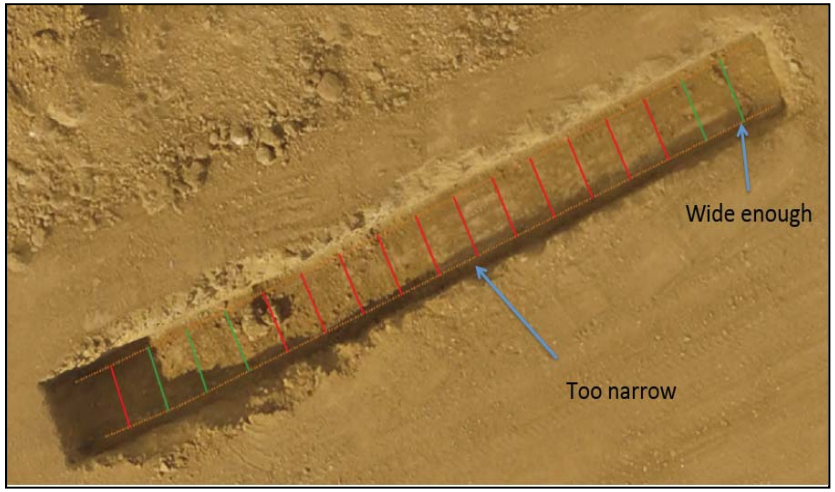
Drone Airware Solution – Pipeline Construction

Right of Way Control



Check and visualize if row width is meeting requirements

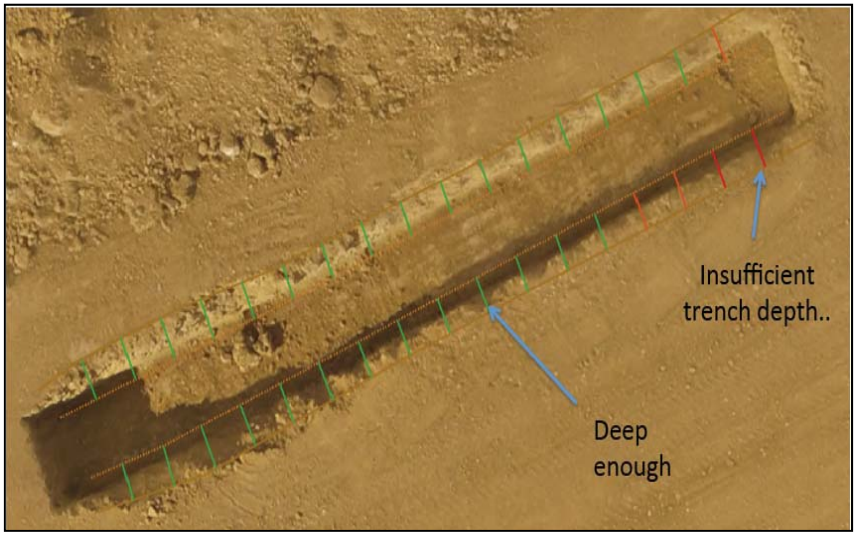
Trench Control



Check and visualize trench width as per specifications

Drone Airware Solution – Pipeline Construction

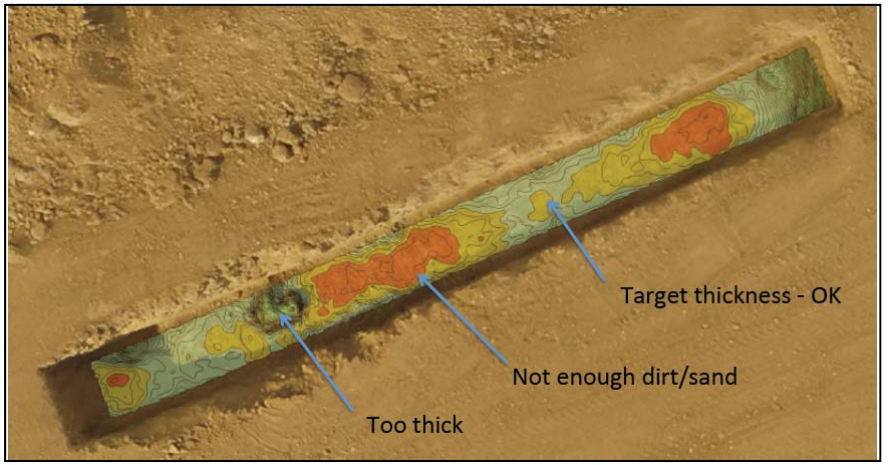
Trench Control



Check and visualize trench depth as per specifications

Bedding Control

Check and visualize bedding thickness in a second



Drone Airware Solution – Summary

Caterpillar Airware Solution used REDBIRD Cloud Platform and

- This solution is providing a digital access to Pipeline job site leveraging drone flights data converted into cloud based 2D and 3D visualization.
- It provides to authorize users from multiple background an easy access with navigation, measuring, analytical and reporting functions around high quality updated jobsite views from various captured situation/date (DATASET).
- REDBIRD PLATFORM collaboration capability with annotation and push notification shared between the users can turn the various documents, data and communications typically exchanged between jobsite employees into a digital format that can be track over time.
- On the multiple sites that currently use this solution, pipeline customers typically see:
  - Improvements in pipelaying operational efficiency both by significantly lowering the cost, and also improving reporting accuracy and data capture time.
  - Improvements in safety compliance by accurately measuring trench depths, widths, safety berms and the right of way specifications

Thank you !