

# **Integrated Solution for Pre-Construction Utility Detection and Mapping**

---

Katherine Broder

April 2019



# Digital Construction

Building Information Modelling (BIM) is applied at every stage of the construction and infrastructure process



# Individual data collected in underground utility asset detection and mapping

Cable Locator surveys

Asset and cartography survey

GPR surveys



3D reality reconstruction



Cartography restitution



Visual inspection



**Clear need for accurate  
highly reliable  
up to date information -  
usable immediately**

## High Quality Precision Sensors

### Detection



### Positioning



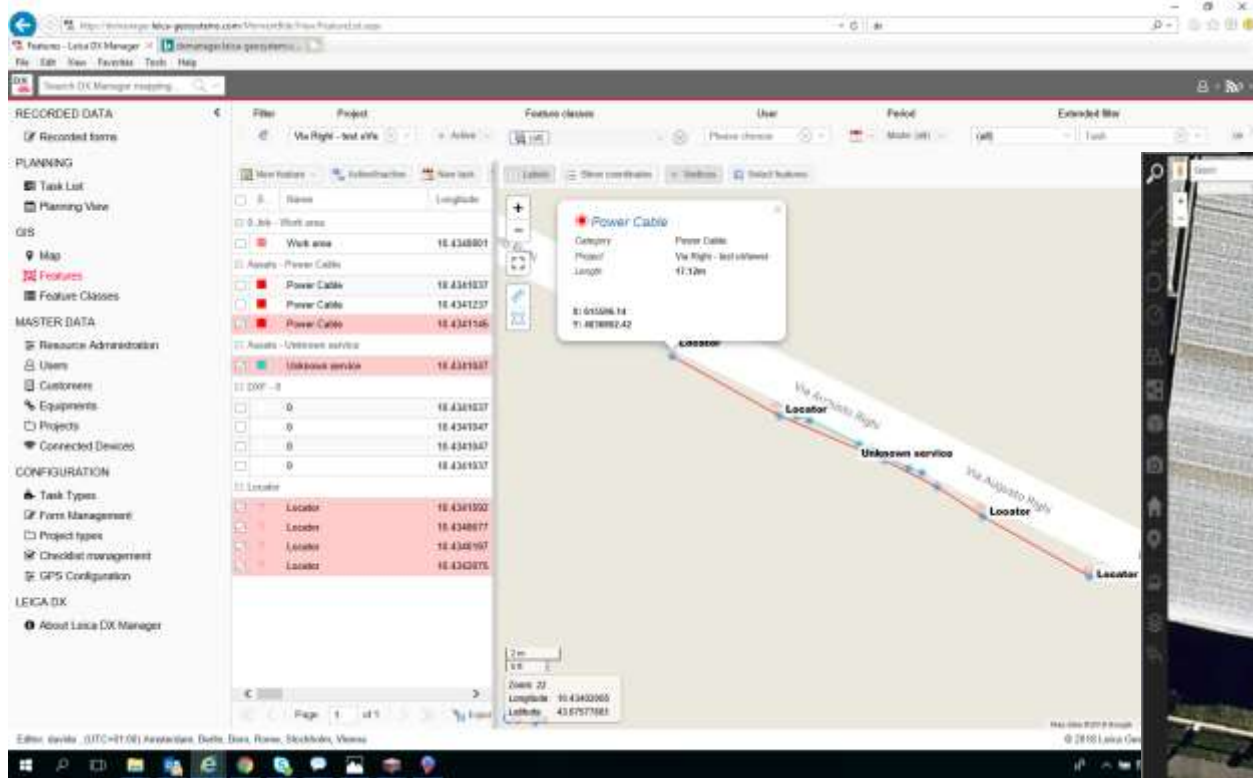
## Software and Data Analytics



## Unique Value Proposition in the Market



# Fusion of Detection and Positioning Data

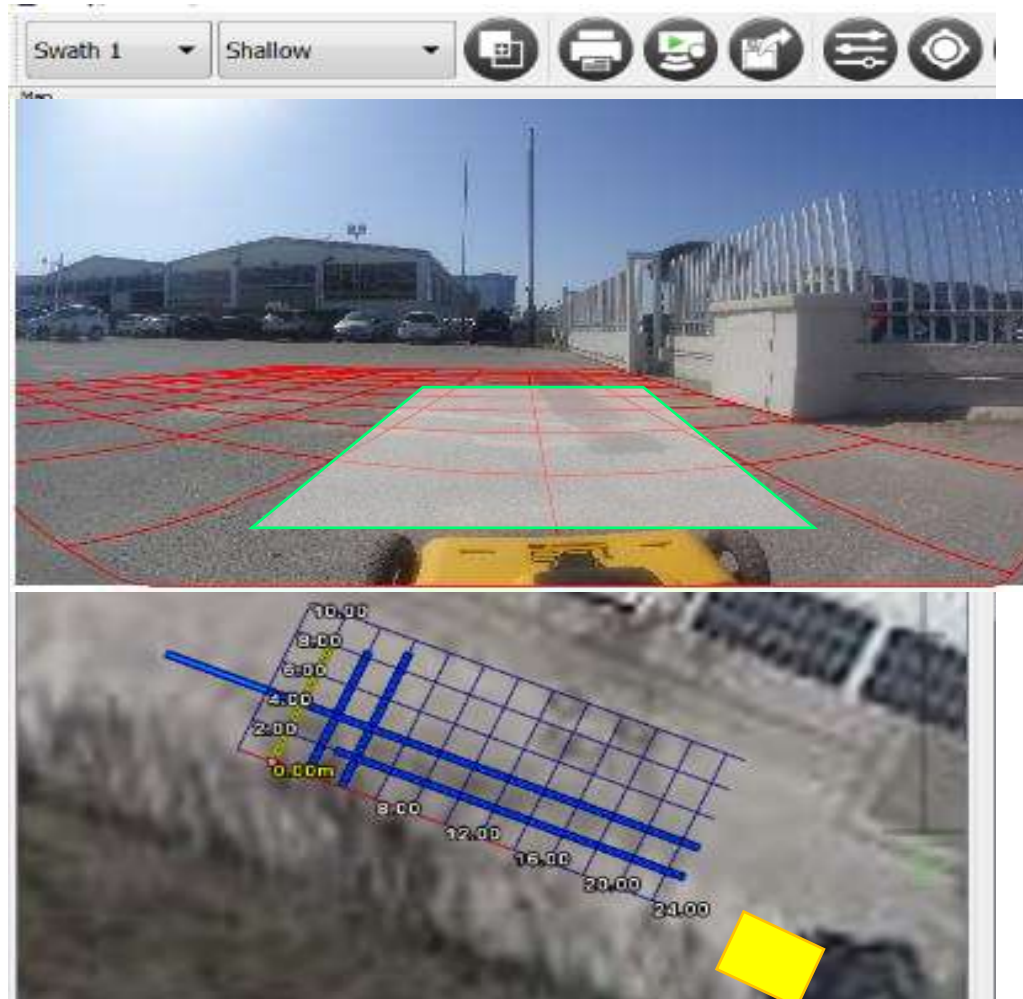


Real time field to office data acquisition



On site visualization of detected pipes on imported cartography and images

## Fusion with visual data and inspection – relocation



- Synchronization of detection data and pictures taken by on-board camera
- Projection of aid elements to guide the acquisition procedure
- Georeferencing of inspection pictures (e.g. manhole inspections)

# Fully integrated Hexagon solutions for utility detection and mapping

Streamlined process from field to office covering the entire workflow

## Utility Mapping with Big Data Analytics





## Fully integrated Hexagon solutions for utility detection and mapping

Streamlined process from field to office covering the entire workflow



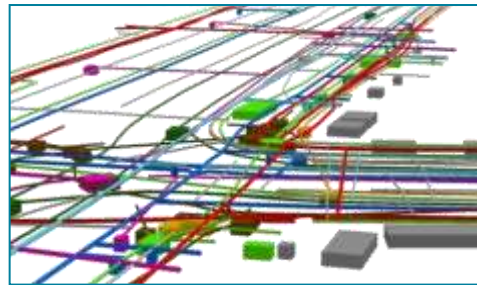
# Fully Integrated Solutions for Utility Detection and Mapping

Acquire subsurface data accurately and turn it into reliable, meaningful information for our customers

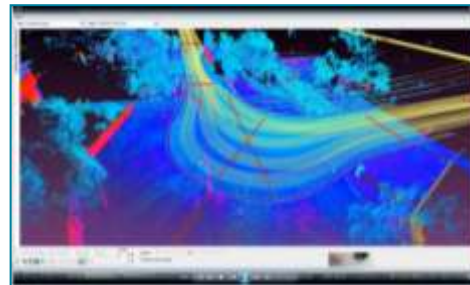
Applications



Utility detection



Utility mapping



Asset reconstruction

Solution

**Detection & Mapping**

**Locate**   **Map**   **Capture**

**Positioning**

**Services**

- Sales Services
- Detection Campus



Unique Hexagon Offering

1. Safety (for people)
2. Reliability (accurate data)
3. Availability (fast decisions)