

Providing solutions using innovative tools

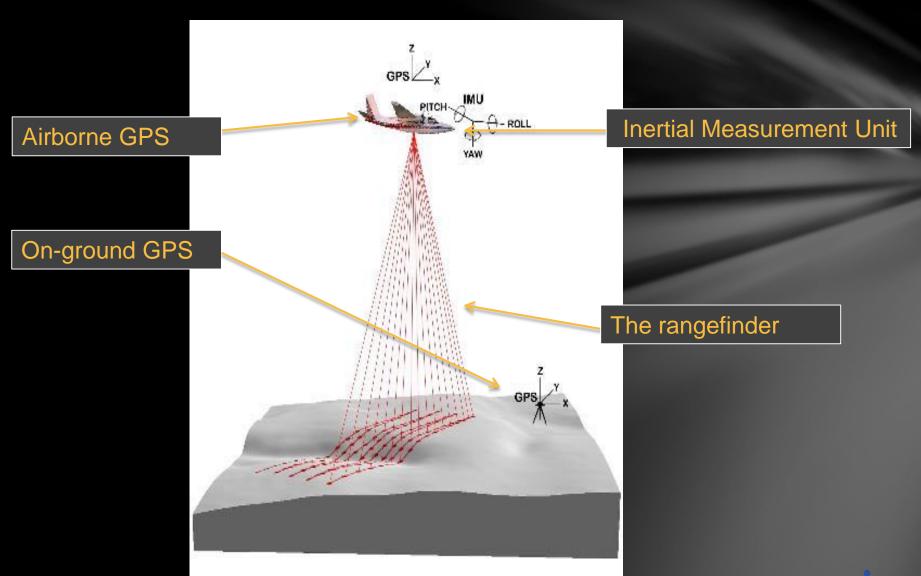
Overview

- Background.
- What is LiDAR?
- Data Collection Methods and Vieworx.
- LiDAR Applications to Wetlands.
- Digital Construction Services.

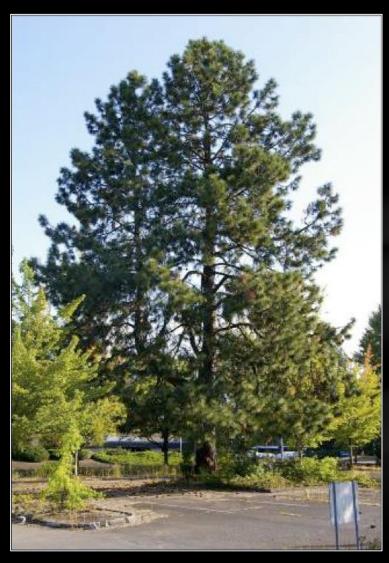


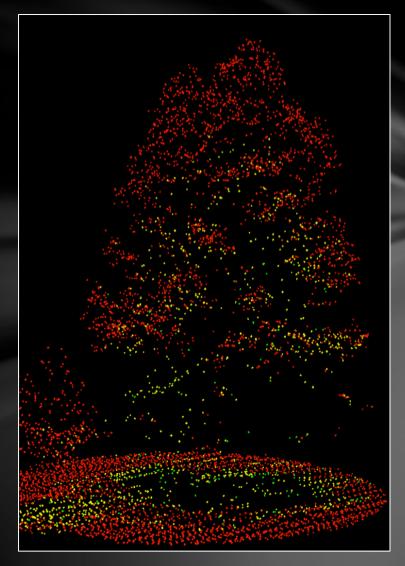
Background Plan **Deliver Implement**

Light Detection and Ranging (LiDAR)



High Point Density





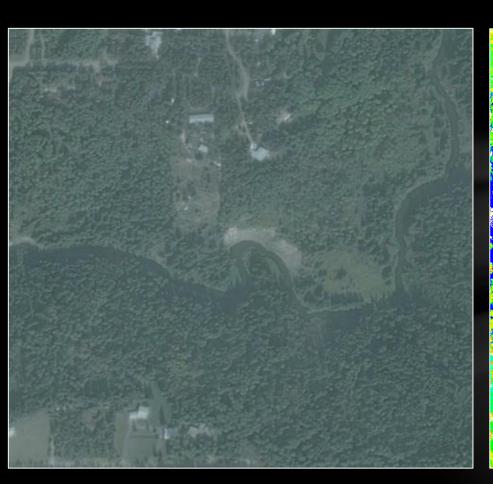


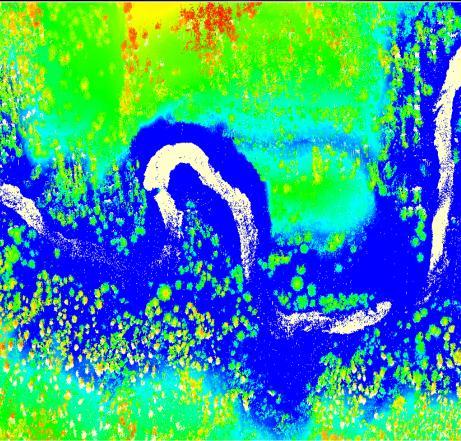
Multiple Returns





Aerial Photo vs. Point Cloud

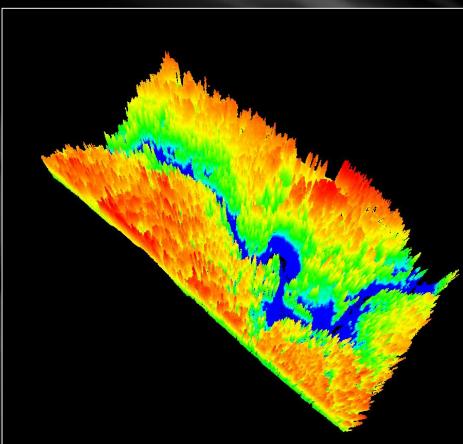






Aerial Photo vs. Point Cloud

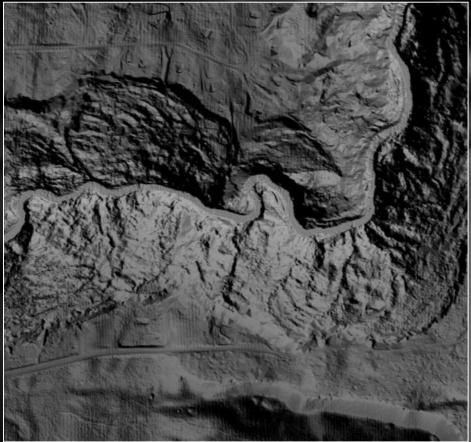






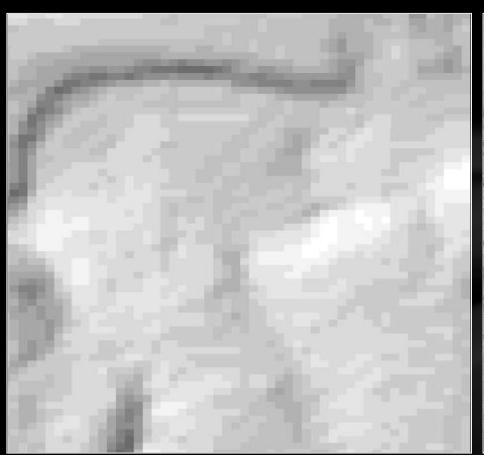
Aerial Photo vs. Bare Earth

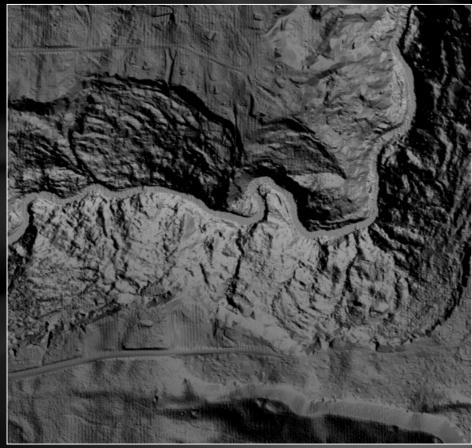






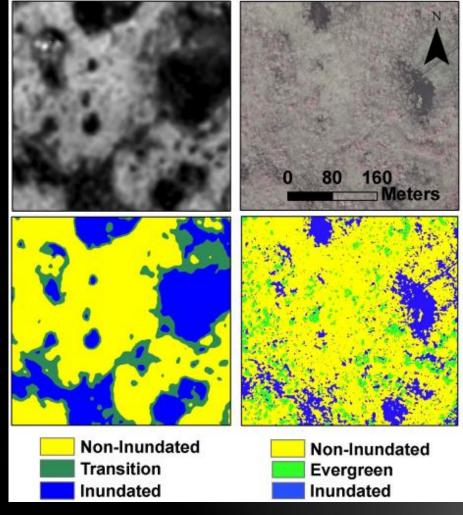
Bare Earth Photo vs. Bare Earth LiDAR







LiDAR for Wetland management

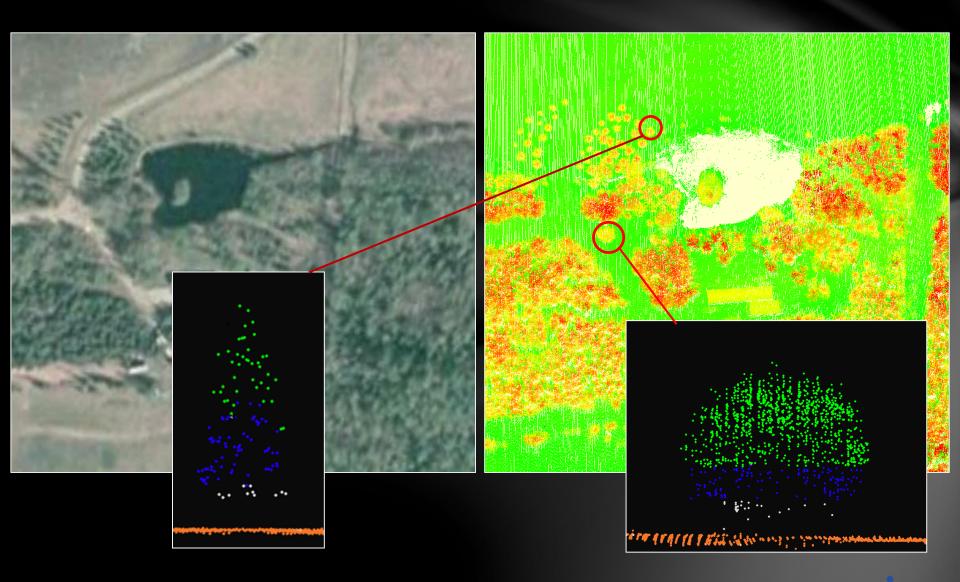






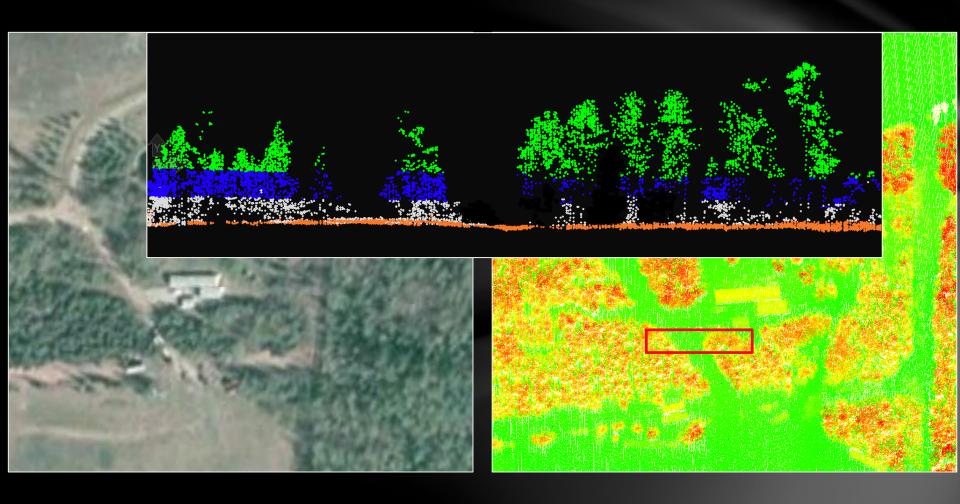
Source: Lang and McCarty 2009

Forest Structure Characterization



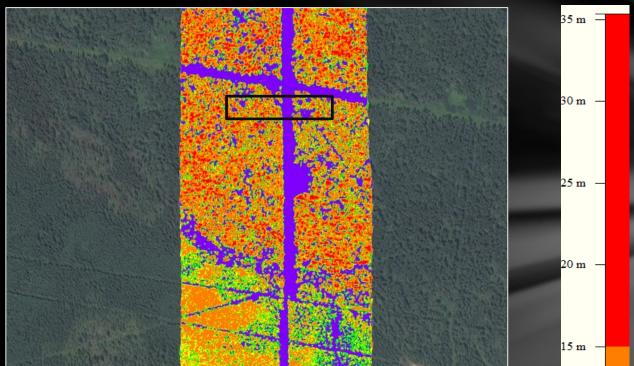


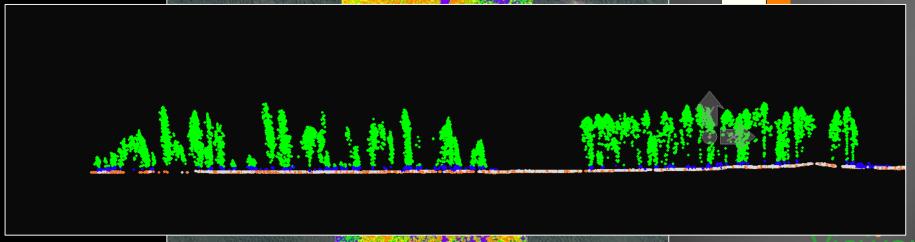
Forest Structure Characterization





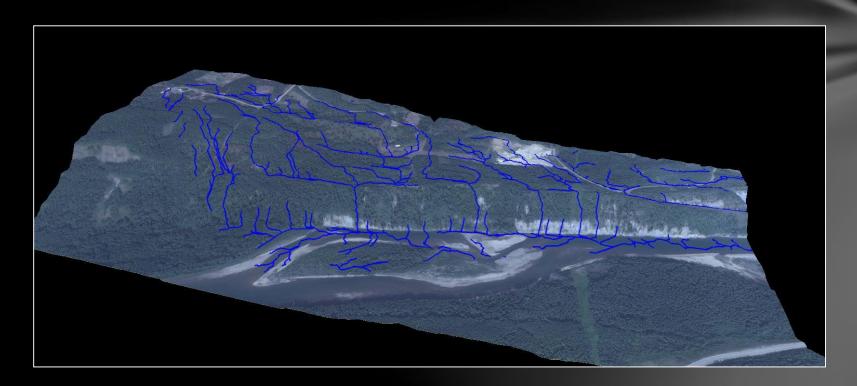
Vegetation Height Models





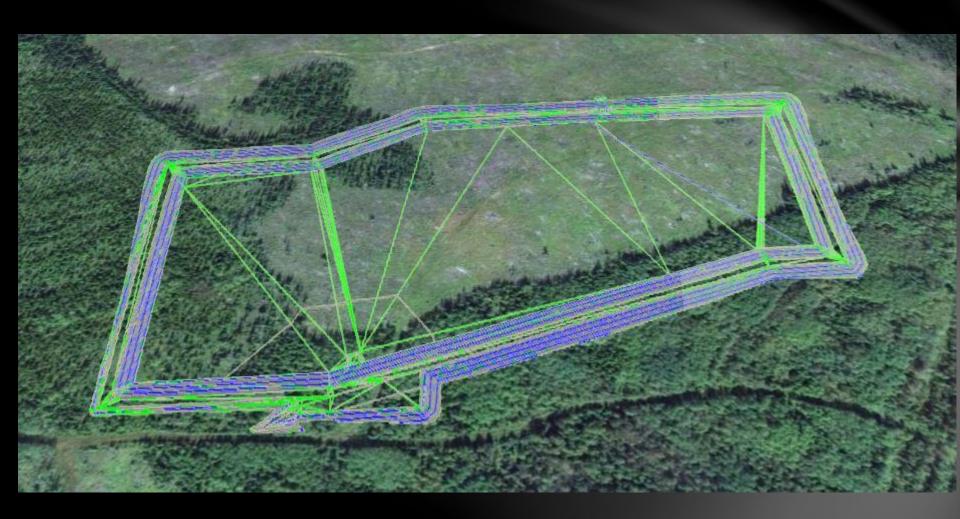
LiDAR- Drainage

- Wet Area Mapping = Spatial distribution and extent of zones of saturation
- Runoff Volume
- Flood Predictions
- Erosion Rates



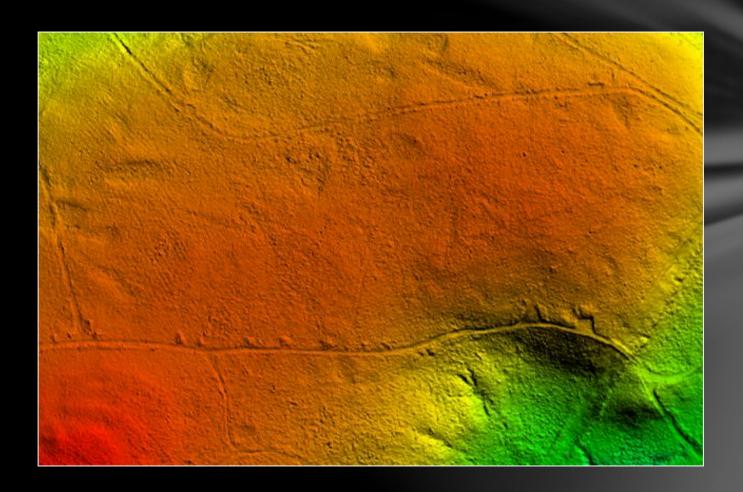


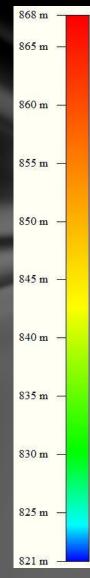
Planning - Design





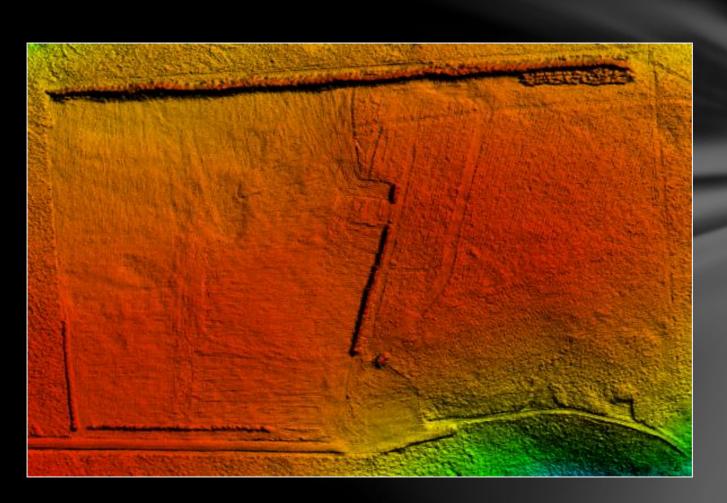
LiDAR Progress

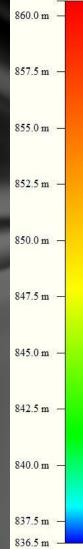




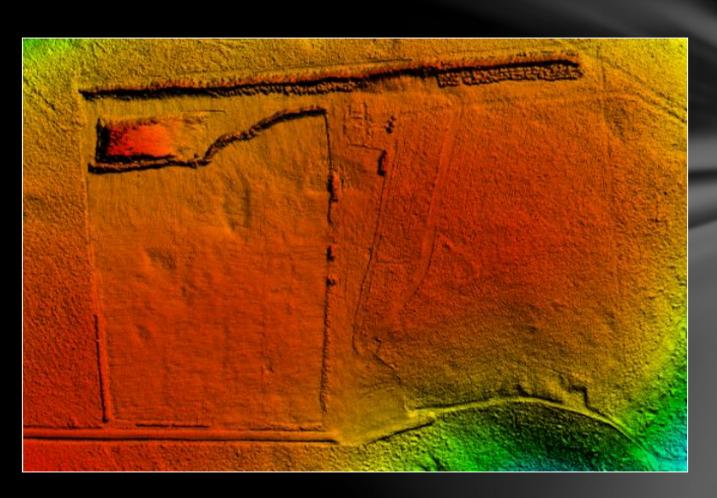


Source: July 2015, Vieworx





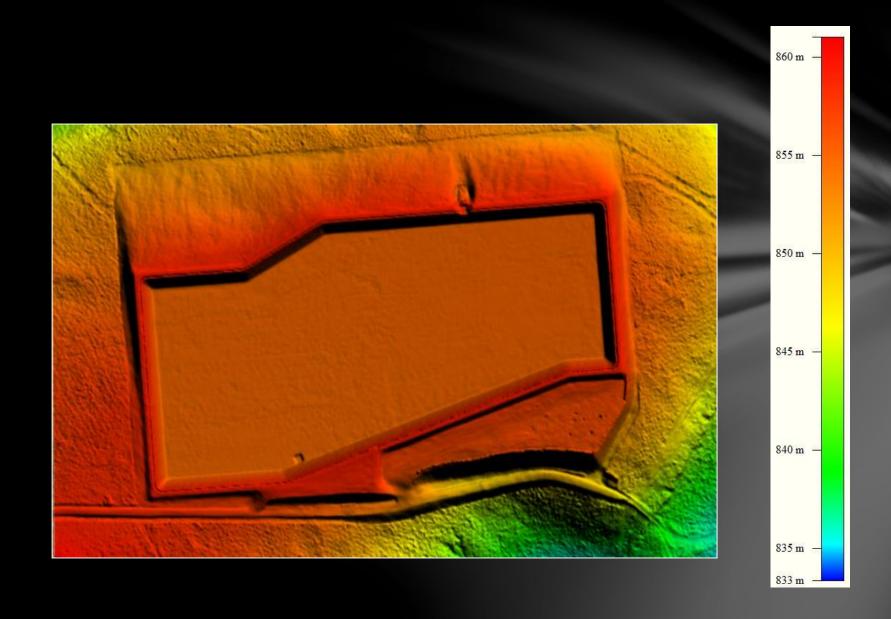






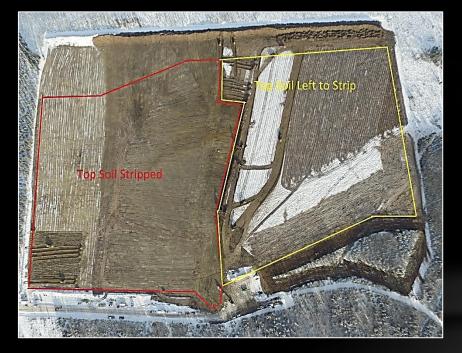


Source: November 2015, Vieworx





Source: December 2015, Vieworx









Pipeline Facility







Sign Down







Water- Crossing







Final Inspection







Innovation





Innovation – Wood Chip road





Innovation- Geocells





Innovation – Wetland Restoration





Innovation-Tree planting





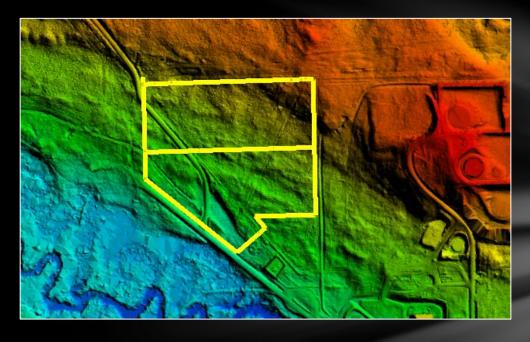


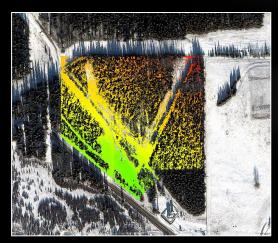


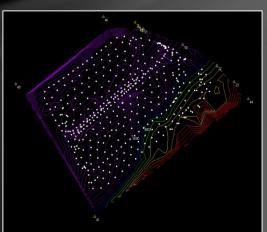
















Deliver

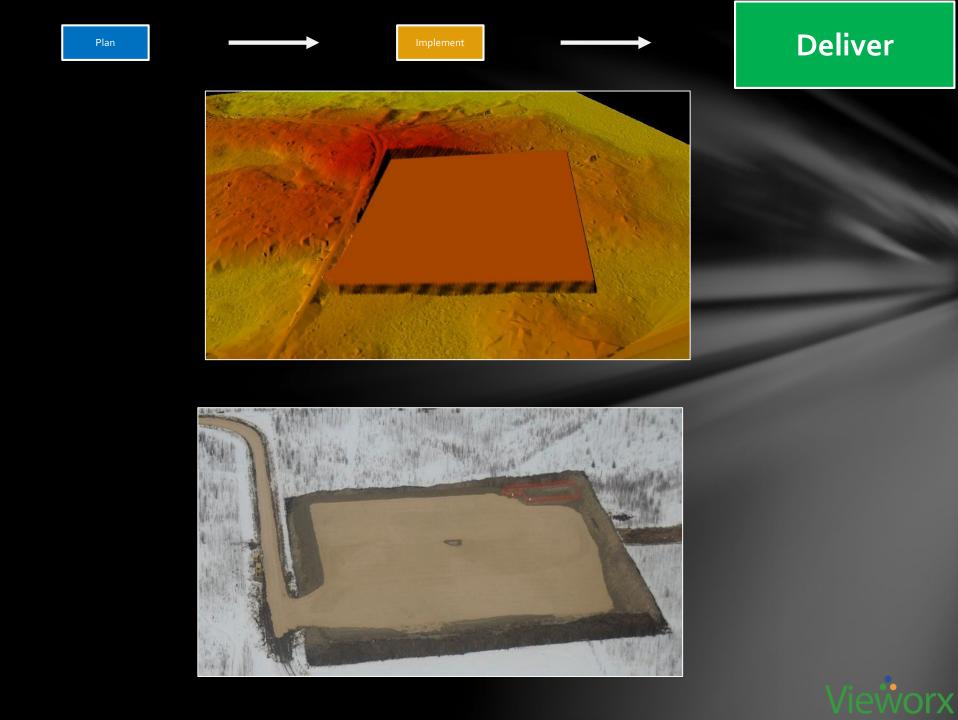
Digitally – Driven Construction Tools











Summary

- LiDAR offers many advantages over traditional surveying techniques.
- LiDAR produces fine spatial resolution necessary for many applications.
- Vieworx Geophoto has the innovative tools to deliver highly accurate, cost- effective products.



Contact us:

Website: www.vieworx.ca

Office: (780)-532-3353

Email: mike.head@vieworx.ca

kimberly.dhun@vieworx.ca

Address #112, 8716 108 Street

Grande Prairie, Alberta T8V 4C7

