

A stylized satellite icon with a green circular base and two white rectangular solar panels, orbiting a green elliptical path.

LiDAR Road Scanning

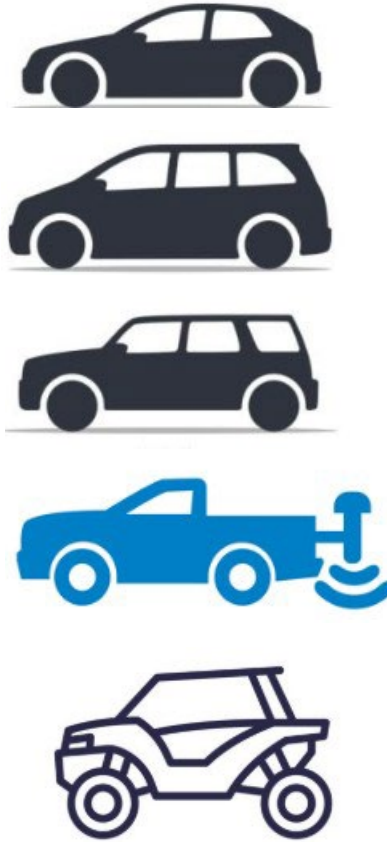
MAPA Spring Training 2025

Presented By: Connor Kennedy

Ozark Laser & Shoring



System Components



System Setup

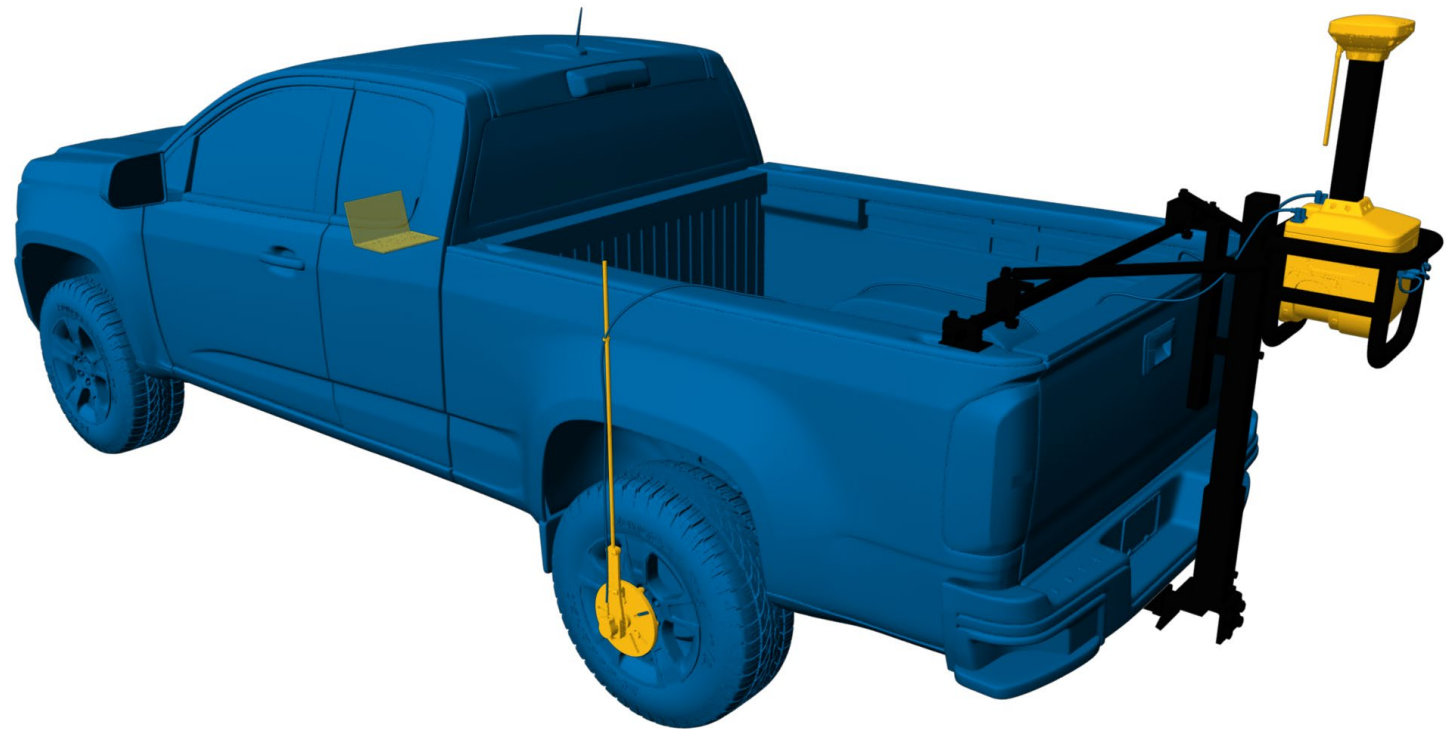
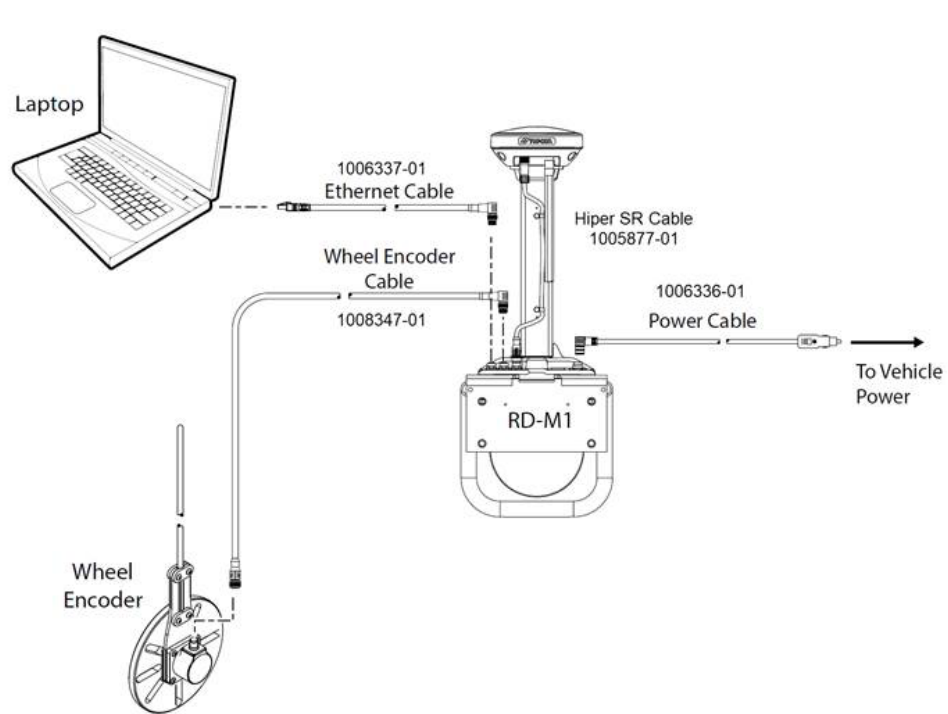
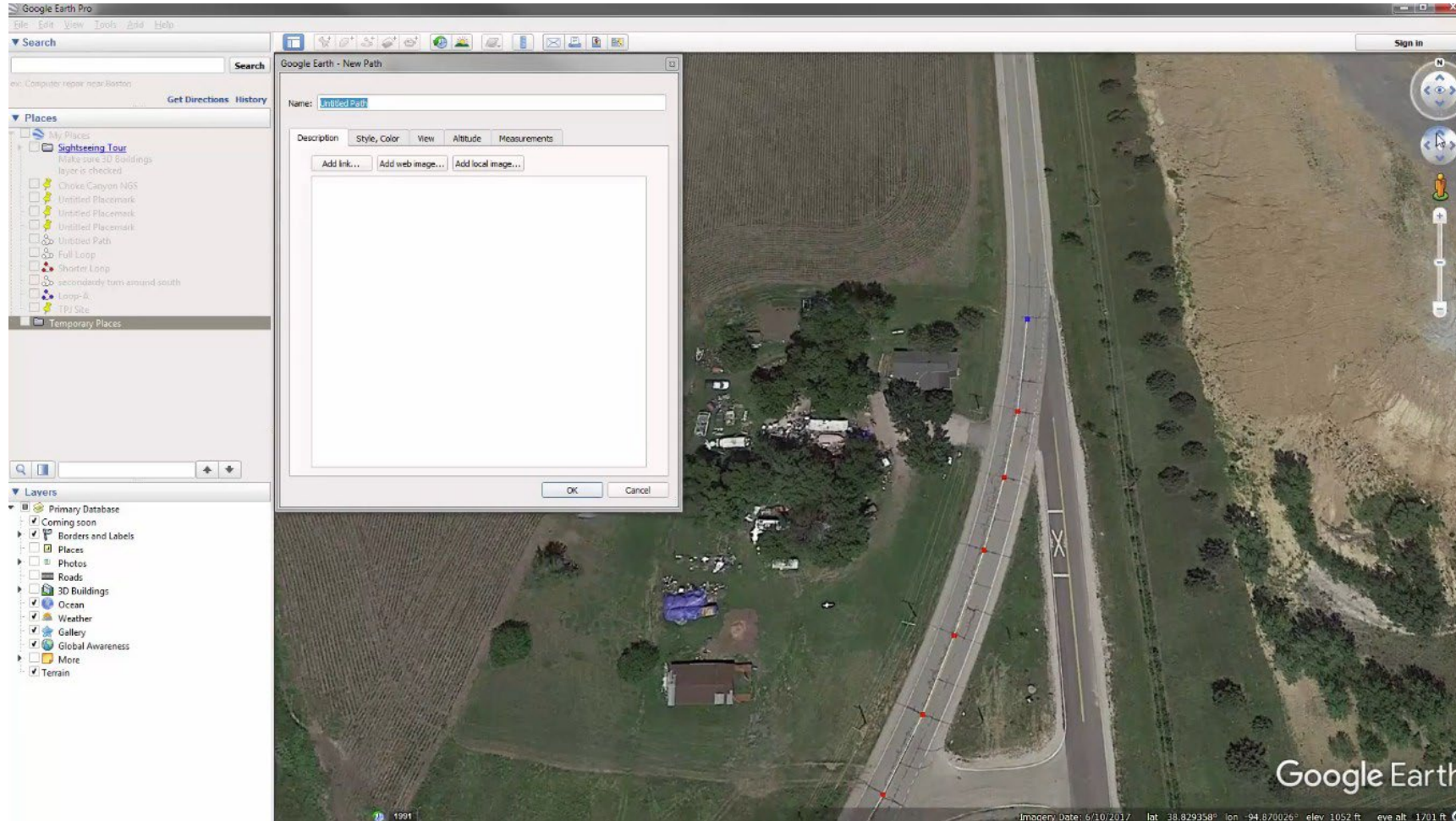


Figure 1: RD-M1 System

Scan Preparation



Vehicle Measure - Up

RD-M1 Settings

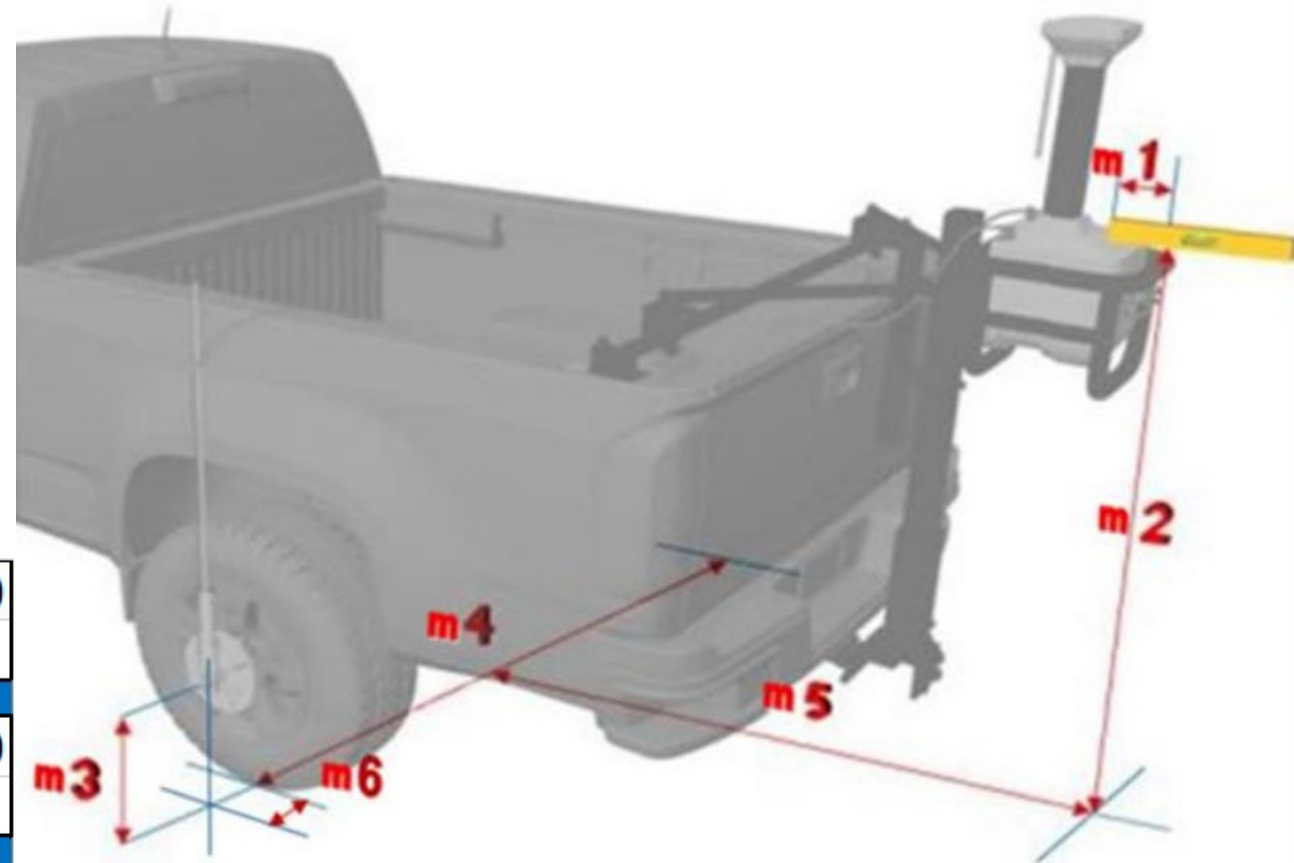
Profile: New vehicle [Delete] [Import] [Export]

Wheel Encoder

Up = m2 - m3 L or R = (m4 :2) + m6 Front = m5 - m1

Up: 3.825459 feet L or R: 3.444882 feet Front: 5.052493 feet

UP:		-		=	0
	Measurement 2		Measurement 3		
L or R:		/2		+	0
	Measurement 4		Measurement 6		
Front:		-		=	0
	Measurement 5		Measurement 1		



Scanning

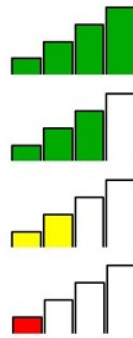


Status Bar

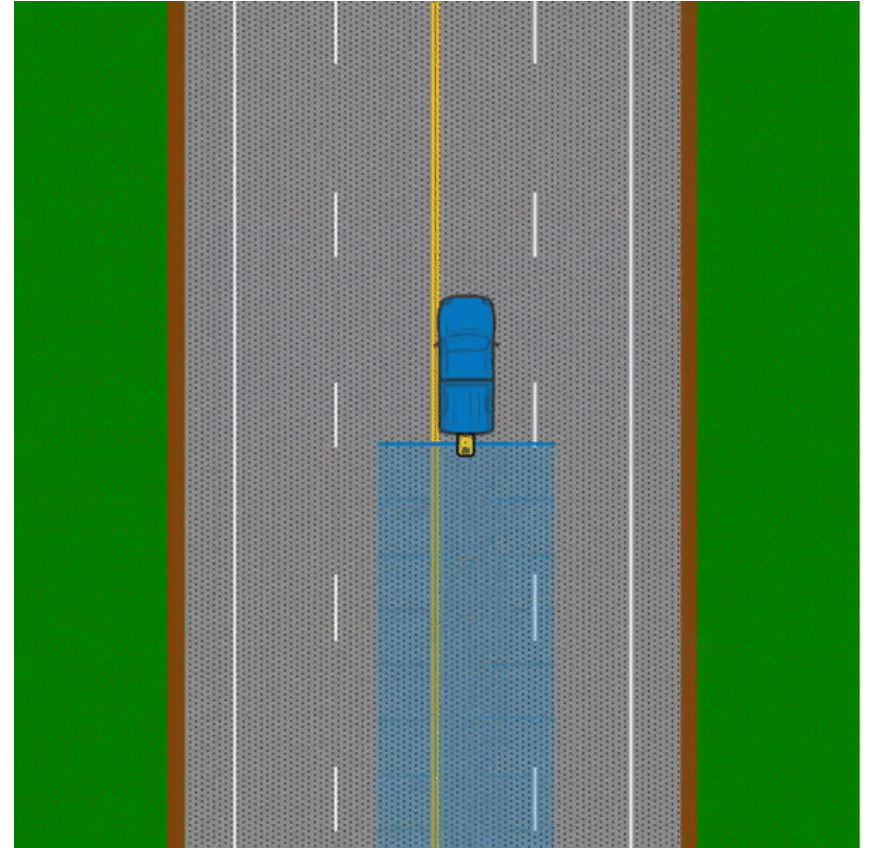
Control buttons

Display buttons

Memo buttons



in	mph
< 3	< 17
3 – 6	17 – 34
6 – 9	34 – 51
> 12	> 51



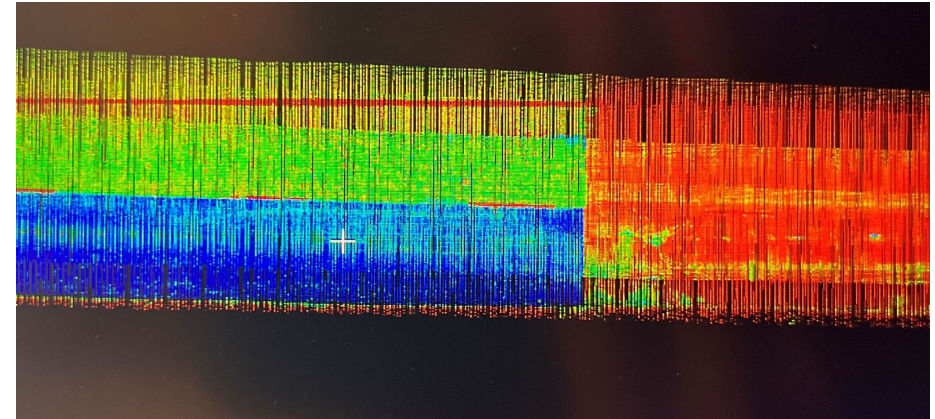
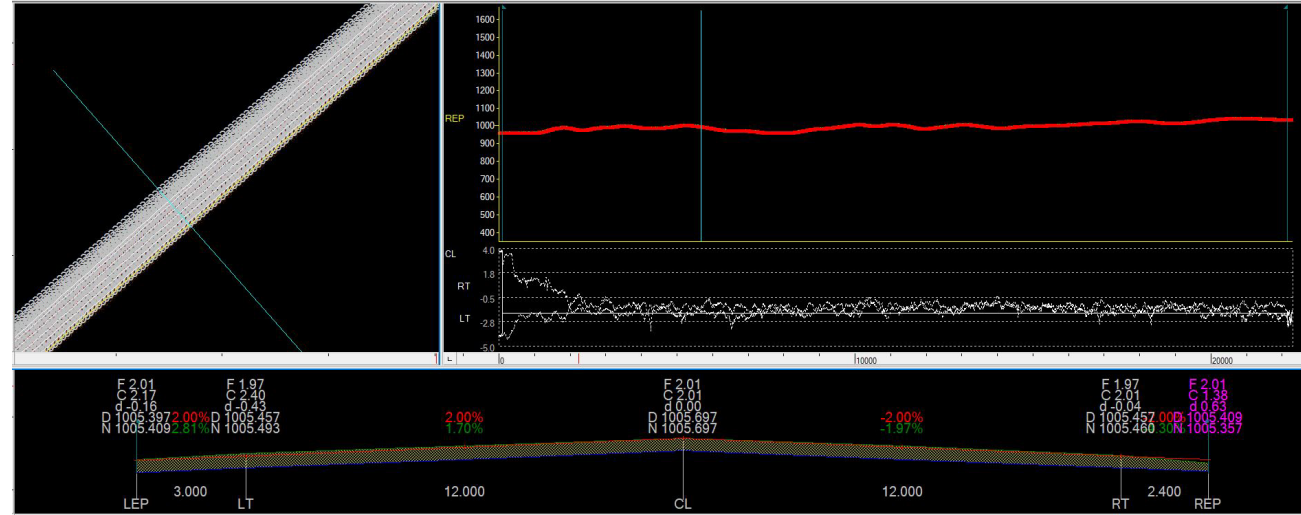
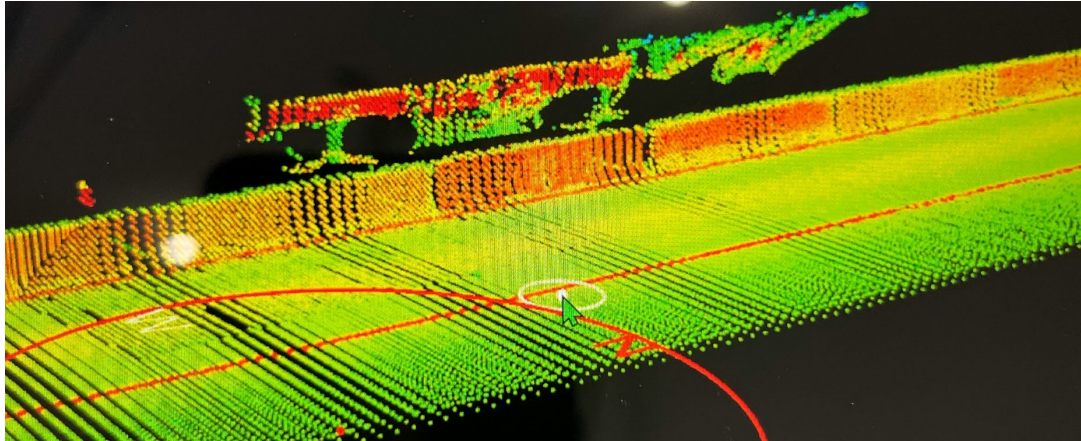
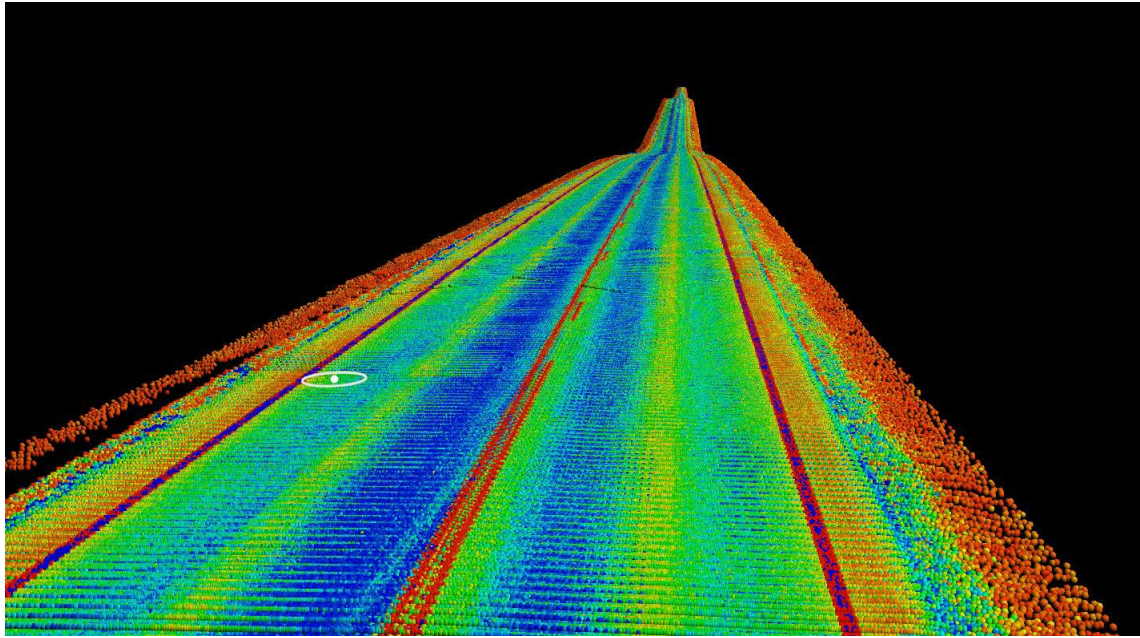
Data Gathering

- ※ End the scan and turn off base station
- ※ Control point location and base station log file
- ※ Organize all files produced from scan into one main folder on desktop

- raw.rdm
- raw_gps.info
- raw_rdmx.packets
- raw_rdmx.packets.index
- raw_rdmx.rdmx
- rdm1

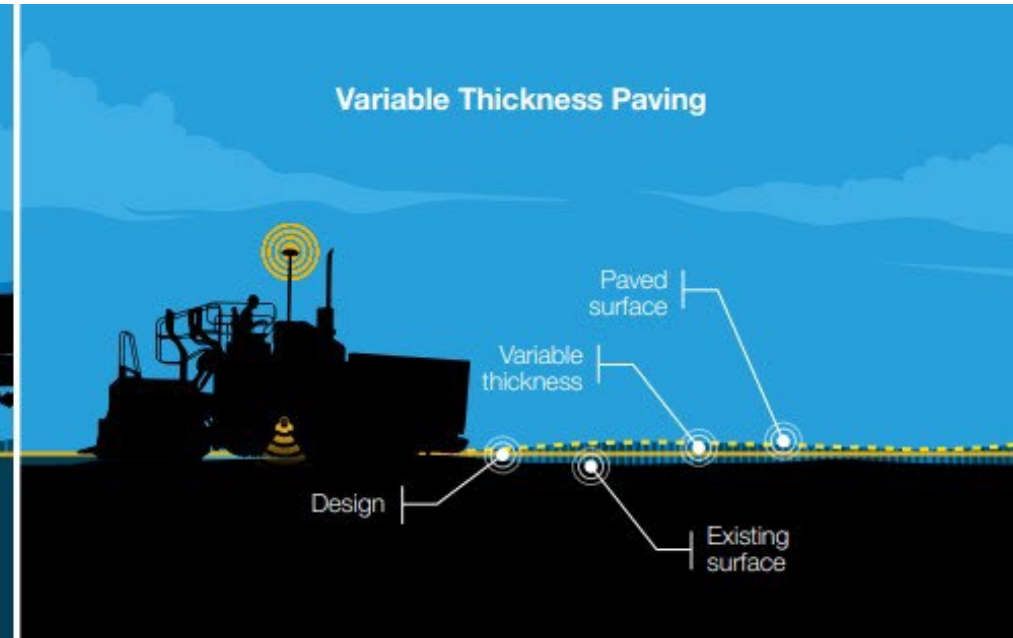
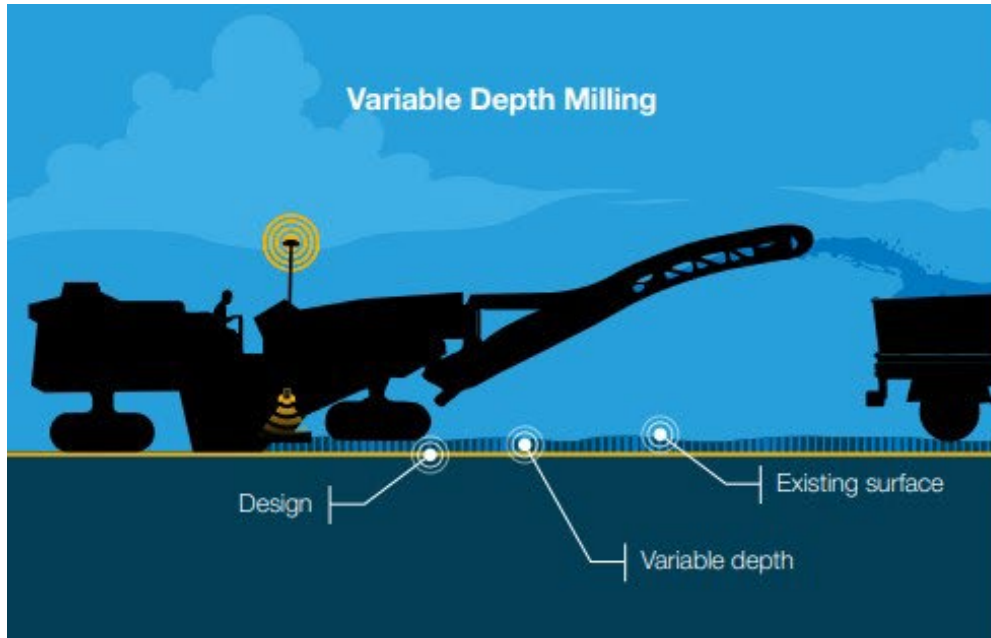


Data Processing



Using the Data

- ✧ Total road re-design, lift by lift
- ✧ Accurate material quantities and tracking
- ✧ Takes guess work out of headers and joints
- ✧ Virtual Ski reduces design time
- ✧ Reduced need for ground and screed personnel



Applications



ESTIMATING



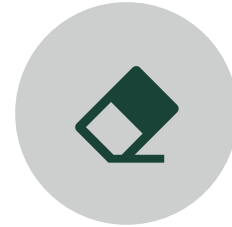
QUARRIES &
PLANTS



MUNICIPALITIES



PARKING LOT
MAINTENANCE



STRIPING



DESIGN



LAND
DEVELOPMENT



VERIFICATION &
CERTIFICATION

Our Team

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