

An aerial photograph of a large construction site. The ground is mostly brown and uneven, with some areas of darker soil. There are several pieces of construction equipment, including a yellow excavator, a white truck, and a yellow crane. There are also some materials and structures scattered around, such as a white container and some pipes. The overall scene is one of active construction work.

## How to Use Drone-Captured 3D Reality Data and VR for Project Pursuit

3DR



Let's Make Virtual-Reality Reality Again



# CHOOSING A PLATFORM - 3DR SITE SCAN

FROM DRONE TO AUTODESK TOOLS WITH A TAP. DESIGNED FOR ENTERPRISE SCALE.

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## The best camera in the sky

- Self Flying
- Best-in-class Sony R10C camera
- Images transfer wirelessly.



## Capture data with Site Scan Field.

- Easy to use.
- No need for service providers.

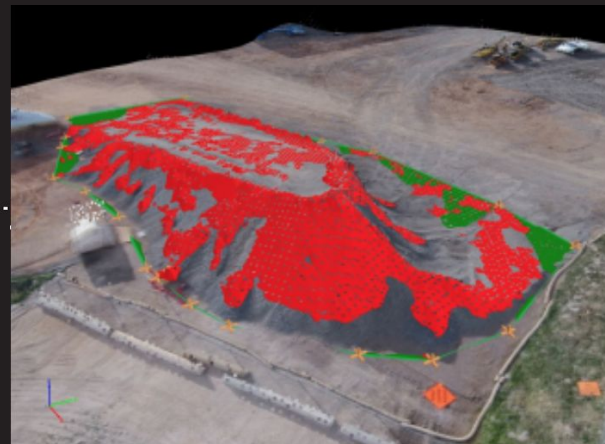


## Analyze and Export to Autodesk

- Built for Enterprise Scale.
- Represents the future paradigm of office-field collaboration.



**PRESS ONE BUTTON TO MEASURE YOUR WORLD...**

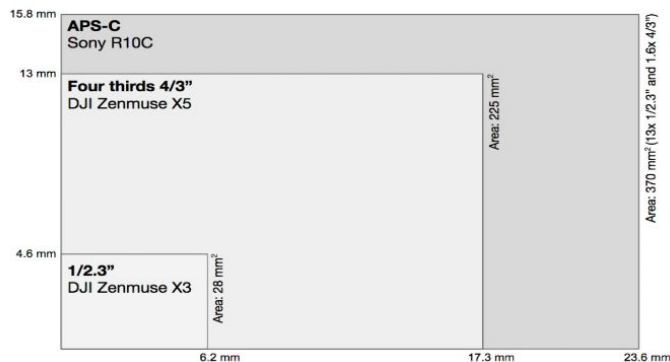


**...SO THAT YOU CAN MANAGE IT**

# NOT ALL DRONES ARE CREATED EQUAL

## SITE SCAN CARRIES THE BEST-IN-CLASS SONY R10C ON A CUSTOM GIMBAL

### CAMERA - LENS SENSOR ANALYSIS

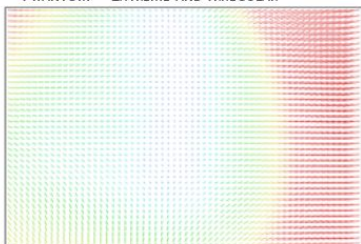


### GROUND - SAMPLING & ACCURACY

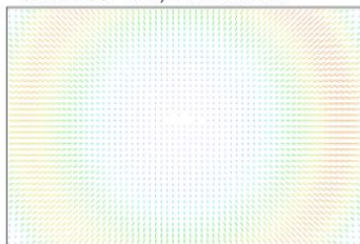
	PHANTOM 4	INSPIRE X5	SITE SCAN R10C
GROUND SAMPLING	1.2\" (3.1cm)	.075\" (1.9cm)	0.45\" (1.1cm)
LATERAL ERROR*	3.84\"	1.60\"	0.95\"
VERTICAL ERROR*	32.5\"	3.9\"	2.0\"

\* WITH GROUND CONTROL POINTS VERIFIED WITH SURVEY CHECK POINTS

### PHANTOM — EXTREME AND IRREGULAR

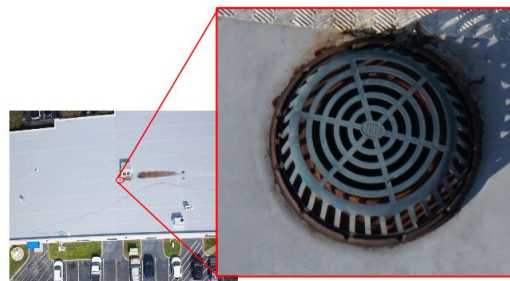


### SONY R10C — LOW, EVEN DISTORTION



Photogrammetric camera analysis courtesy of McKim & Creed

### CAMERA — INTERCHANGEABLE ZOOM LENS



# REALITY DATA CAPTURE WITH SITE SCAN

THOUGHTFULLY DESIGNED FOR THE FIELD PROFESSIONAL AT ENTERPRISE SCALE DEPLOYMENT







Now let's make some VR.



3DR



# CONVERT ACTUAL REALITY INTO VIRTUAL REALITY

BECAUSE WE CAN.

## Step 1 - Site Scan Manager

- [Site Scan Manager](#)

## Step 2 - A360 Drive & Desktop

- [A360 Drive](#)
- Don't use A360 Drive? Skip this step and download directly from Site Scan Manager.

## Step 3 - Infraworks 360

## Step 4 - Stingray VR Setup and Import

## Step 5 - Virtual Insanity



An aerial photograph of a large construction site. The ground is mostly brown and uneven, with some areas of darker soil. In the upper left, there are several small, white, rectangular structures, possibly temporary offices or storage units. A white truck is parked in the center-left. To the right, there are stacks of long, thin materials, likely rebar or pipes. Further right, a yellow excavator is visible, and a small white structure is nearby. The overall scene depicts an active construction area.

## THE DRONE PLATFORM FOR EVERY STAGE OF CONSTRUCTION

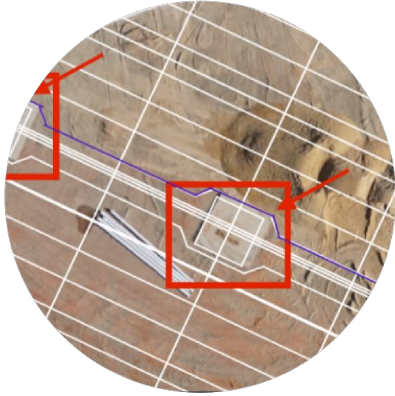
An aerial photograph of a construction site. A yellow excavator is positioned in the lower-left quadrant. To its right, there is a large, circular pile of light-colored material, possibly sand or gravel. Further right, there are several large, dark, irregular shapes that could be piles of earth or debris. In the bottom right corner, a paved road with yellow double lines runs horizontally. The overall scene shows a large-scale earthmoving or construction project.

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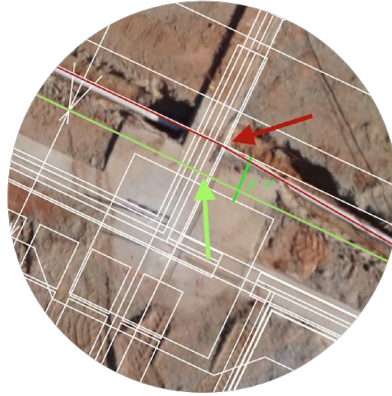


# PREVENT REWORK & FACILITATE CHANGE ORDERS

ROI GREATER THAN THE COST OF SITE SCAN WITHIN FIRST WEEK - ACTUAL CASE STUDY



*7" over-pours,  
incorrect position*



*Pipe fed through  
incorrect sleeve*



*Incorrect trench-work  
vs design.*

- Ended 3 days of stopped work - at a cost of \$24,000 and counting

- Prevent rework
- Helps with Change Orders
- Accurate as-builts



# THE 3DR CONSTRUCTION MODEL/SITE CYCLE





An aerial photograph of a large construction site. The ground is mostly dirt and sand, with some areas of exposed rock or concrete. There are several pieces of heavy machinery, including excavators and trucks, scattered across the site. Some materials, like pipes or rebar, are visible. The image is split horizontally into two panels. The top panel shows a different section of the site with more equipment and materials. The bottom panel shows a different section with a road and a large pile of material.

*Thank you!*  
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