



Trimble SiteVision

AUGMENTED REALITY SYSTEM

Place your project in the real world

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Authorized distributor Trimble for SR



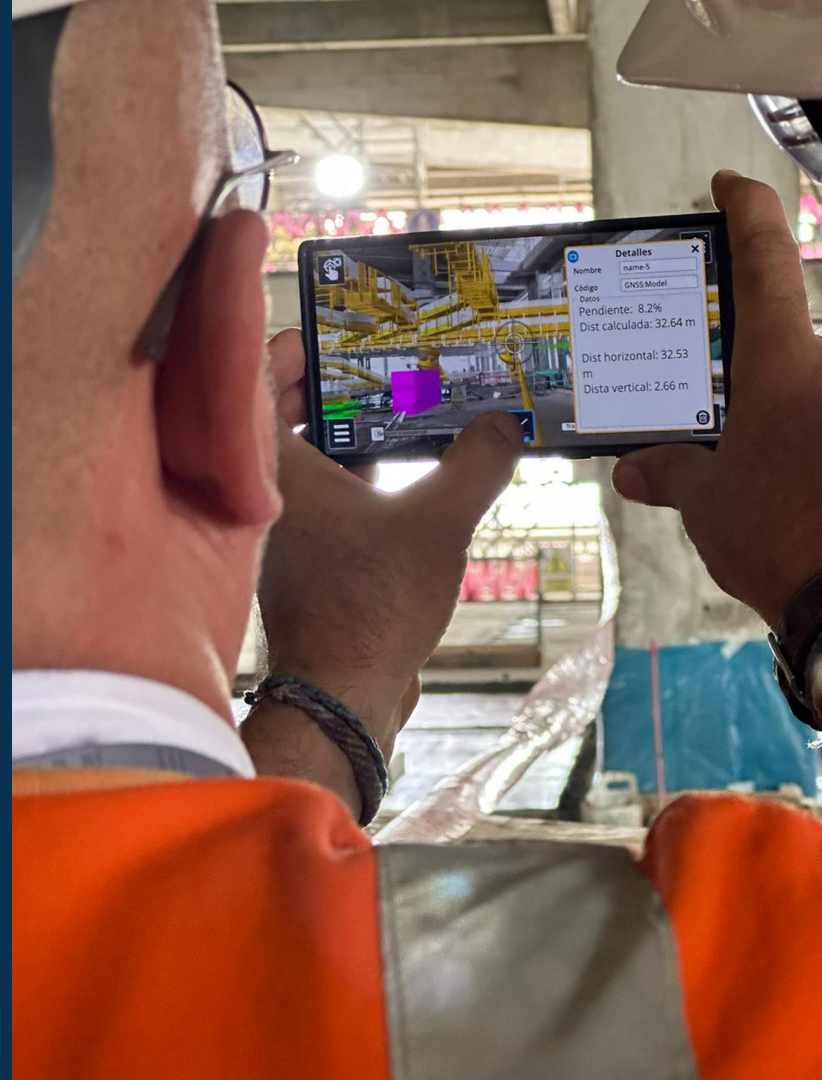
An application for your mobile device designed to visualize, adjust, measure, document, and collect data pertaining to your

- Designs
- Plans
- On-Site Conditions

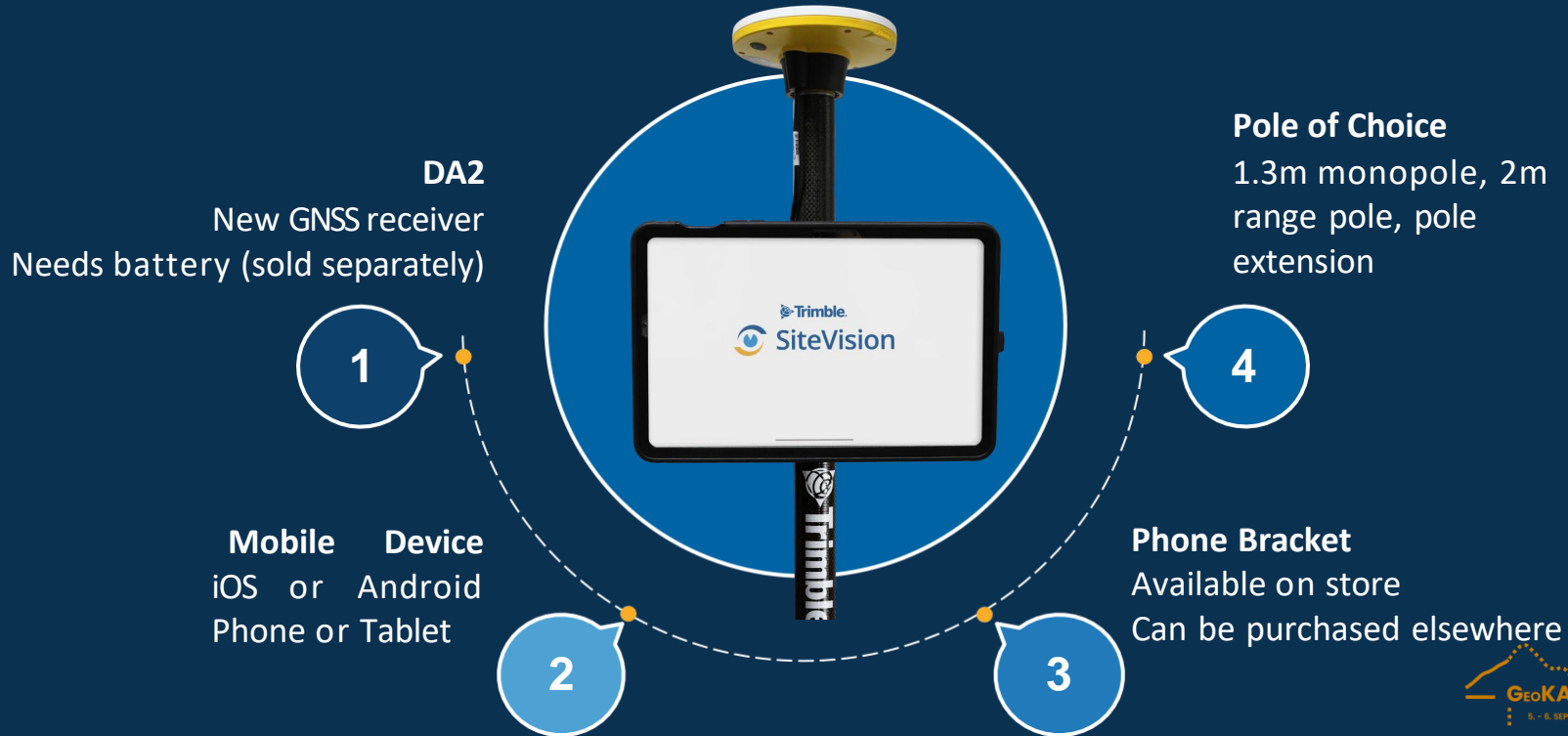
All while viewing these in their actual locations with AR on your mobile device.

SiteVision on the Project

- Model designs were placed using the **QR Code method & GNSS**
- **Attribute information** was able to be leverage for **inspection purposes**
- **Site Engineers and contractors** were able to quickly check measurements for **QA/QC** purposes



Required Hardware





Trimble DA2



Key DA2 Features

iOS & Android



Bluetooth
Delivery



Versatile



Lightweight



ProPoint
Technology



Catalyst
Positioning





What is Catalyst?

Trimble Catalyst is a revolutionary offering from Trimble that uses a software defined GNSS receiver technology.

The solution enables a customer to subscribe to the Catalyst service in order to enable the GNSS receiver to operate at a level of accuracy related to their subscription level.

Catalyst consists of the DA2 receiver, a power bank of your choice, any Android or iOS device, and your application.

Compatible Devices

Reminder: SiteVision is an application, and only performs as well as your hardware



iPad Pro

(2020 or newer, must run at least iOS13)

- Preferred Hardware
- 3D Scan enabled
- Optimal screen for collaboration
- Best performance
- LiDAR measurements



iPhone Pro/Pro Max

(12 Pro/Pro Max or newer, must run at least iOS13)

- 3D Scan + portable
- Lightweight
- Best performance
- LiDAR measurements



Trimble TDC6

(is ARCore compatible, must run Android 9 or newer)

- Trimble powered
- Optimized for Siteworks/SiteVision
- Attachments designed for SiteVision hardware
- AR measurements



Android Phone

(must be ARCore compatible and run Android 9 or newer)

- Multi-purpose
- Lightweight
- AR Measurements



Android Tablet

(must be ARCore compatible and run Android 9 or newer)

- Multi-purpose
- AR Measurements

3D Scan (LiDAR) Compatible

Compatible w/ Integrated Positioning System

SiteVision: Not all about **HPS2**

All hardware configurations are capable of AR & iOS LiDAR
Only HPS2 has EDM capabilities

HPS2



HPS2

with 1.3m pole



Device only



Short pole

(25cm pole)



1.3m pole

with 25cm pole



2m pole



Excellent positions with integrated
DA2 GNSS receiver

Remote measurements with
integrated EDM

Simple **magnetic mount**

Supports **augmented reality** &
scanning functions of **iOS LiDAR**

Replaceable battery



Specifications

GNSS performance same as Trimble DA2 Catalyst GNSS receiver (Hz: 1cm +1ppm)

Trimble Correction Hub (TCH) included in the SiteVision subscription

EDM/AR position accuracy typical Hz: < 20cm RMS at 10m

EDM typically $\pm 3\text{mm}$ with a range of up to 100m on white walls

Battery lasts 2–2.5 hours per battery.

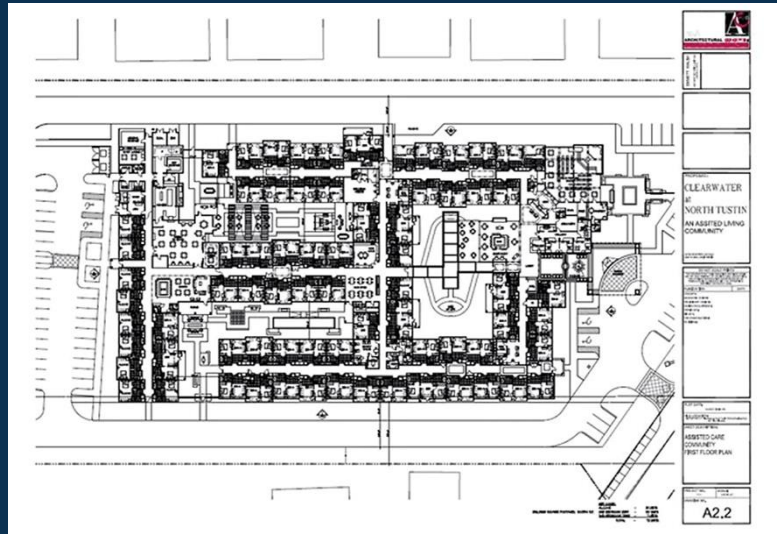
Rugged. Designed for IP65 and drop of 1.2m (4')



File formats supported in SiteVision:

Format:	Points	Lines	Surfaces	Attributes
Trimble Terrain Model .TTM			X	Image Overlay
Trimble MapViewer .TMAP	X	X		X
SketchUp .SKP	X	X	X	
TrimBIM .TRB	X	X	X	X
OGC Web Feature Service .WFS	X	X		X
Project Link File .VCL	X	X	X	X
Esri Geodatabase .GDB	X	X		X
Shapefile .SHP	X	X		X
Esri Web Feature Service .WFS	X	X		X
IFC (2x3, MVD EM.11) .IFC		X	X	X
Drawing files .DWG	X	X	X	
Navisworks .NWD / .NWC		X	X	X
LandXML	X	X	X	X

2D - 3D data - management in Trimble Connect cloud



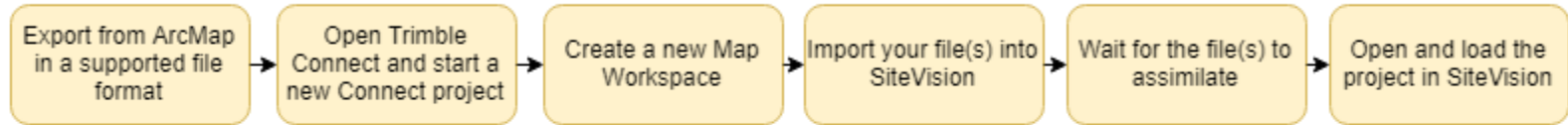
Typical Site Plan



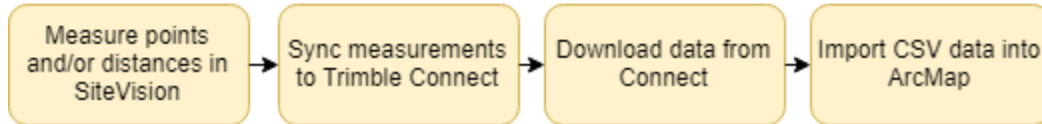
3D Models

Data Workflows - ArcMap

ArcMap to SiteVision



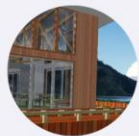
SiteVision to ArcMap





Industries & Applications

Trimble SiteVision is ideal for documenting and collaborating on progress and design changes, helping solve complex industry challenges and uncovering opportunities to work smarter.



Architecture

Bring your models to life



Building Construction

Build with confidence



Civil Construction

See your plan for success



Landscape Architecture and Construction

See your business grow



Residential Development

Tour homes before they're built



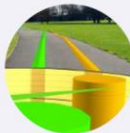
Surveying and Mapping

Bring geospatial data to life



Urban Transportation and Planning

Move forward with confidence



Utilities






See what your data can do








SiteVision app

Reporting, Measurement, and Design Tools



-  BCF Topics / Screensnap
-  Measure Point
-  Measure Grade & Distance
-  Measure Lines & Area
-  Measure Volumes

-  Scan
-  Measure Cut/Fill
-  Plane
-  Profile
-  PDF

Measurement options

Getting Started with Trimble SiteVision: Office to Field Workflows

The screenshot displays the Trimble SiteVision software interface. At the top, a black header bar contains a hamburger menu icon on the left, the text "Getting Started with Trimble SiteVision: Office to Field Workflows" in the center, and a clock and share icon on the right. The main content area is a light gray grid with four dark blue rectangular buttons arranged in a 2x2 layout. Each button has a white label in its bottom-right corner: "3D SCAN" (top-left), "CUT/FILL" (top-right), "VOLUME" (bottom-left), and "GRADE & DISTANCE" (bottom-right). At the bottom of the screen is a video player control bar with a red progress bar. It includes standard playback controls (back, play/pause, forward, full screen, volume, and settings) and a timestamp "4:40 / 5:14 • Collecting data in the field >".

3D SCAN

CUT/FILL

VOLUME

GRADE & DISTANCE

4:40 / 5:14 • Collecting data in the field >

Measuring profiles



Measurement of points, attributes, polygons

The image shows a mobile application interface for AR-based measurement. The background is a real-world scene with a green lawn, a wooden fence, and several cars parked in a lot. A green laser line is projected from a central reticle on the lawn towards a point on the fence. A blue dot marks the target point. A semi-transparent white panel with a blue border, titled "Point Details", is overlaid on the right side of the screen. The panel contains several input fields and a "Data" section. On the left side of the interface, there are several UI elements: a green icon with a leaf and the number "14" and "2cm", a green circular icon with a leaf, a vertical "View Distance" slider, a hamburger menu icon, and a "Cross-section" button. At the bottom center, there is a navigation bar with a back arrow, a reticle icon, and the text "AR".

Point Details

Name:

Code:

Symbol:

Rotation:

Data

Slope Dist: 7.00 m
Horizontal Dist: 6.83 m
Vertical Dist: 1.51 m

Vertical Angle: 102° 26'
Heading: 34° 40'

Easting: 317528.7 m
Northing: 842094.6 m
Elevation: 728.90 m

Visual design creation, reconstruction



CREATE AND REVIEW DESIGN CONCEPTS ON SITE

Visual inspection - designer-developer



PLAN YOUR DREAM HOUSE

Scanning - display of scans

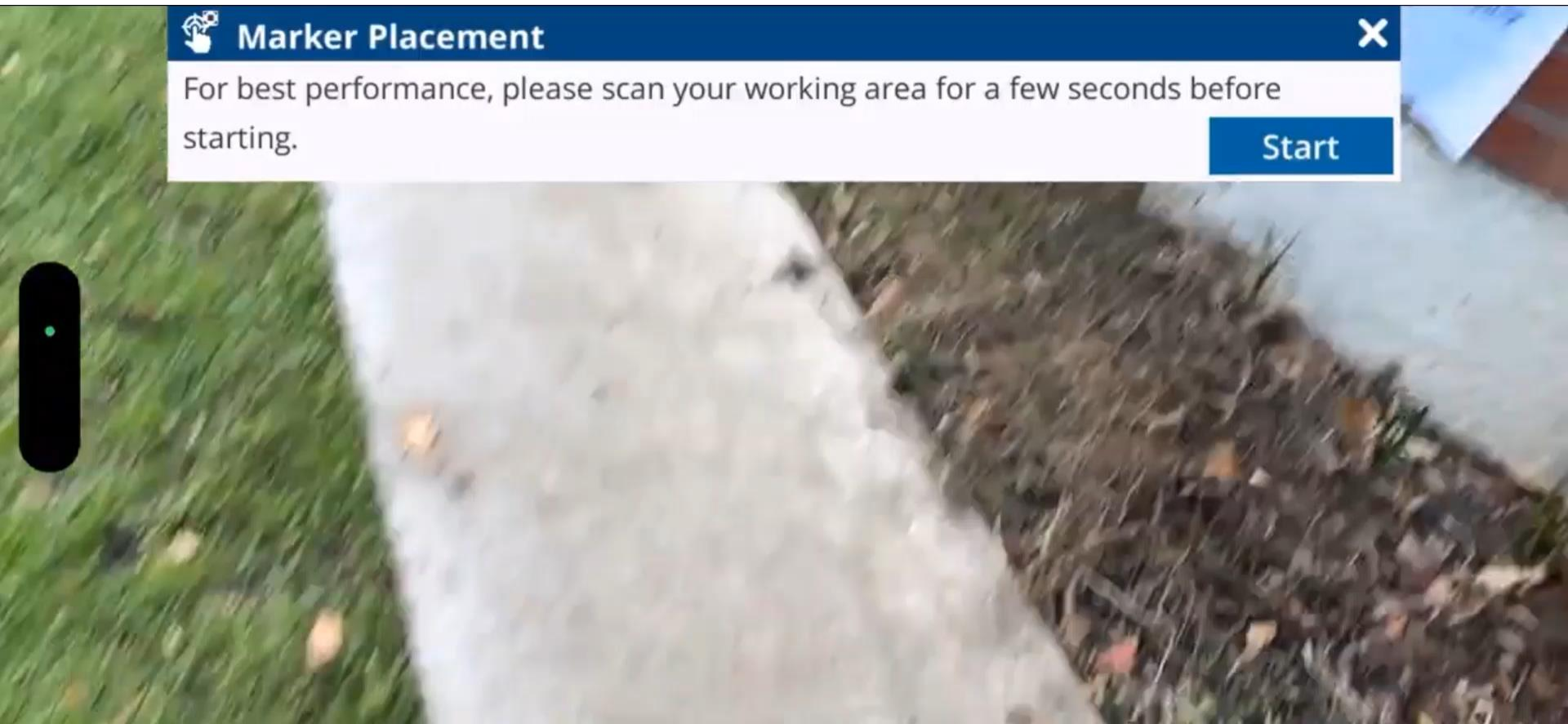


Marker Placement



For best performance, please scan your working area for a few seconds before starting.

Start



PDF maps in the real world



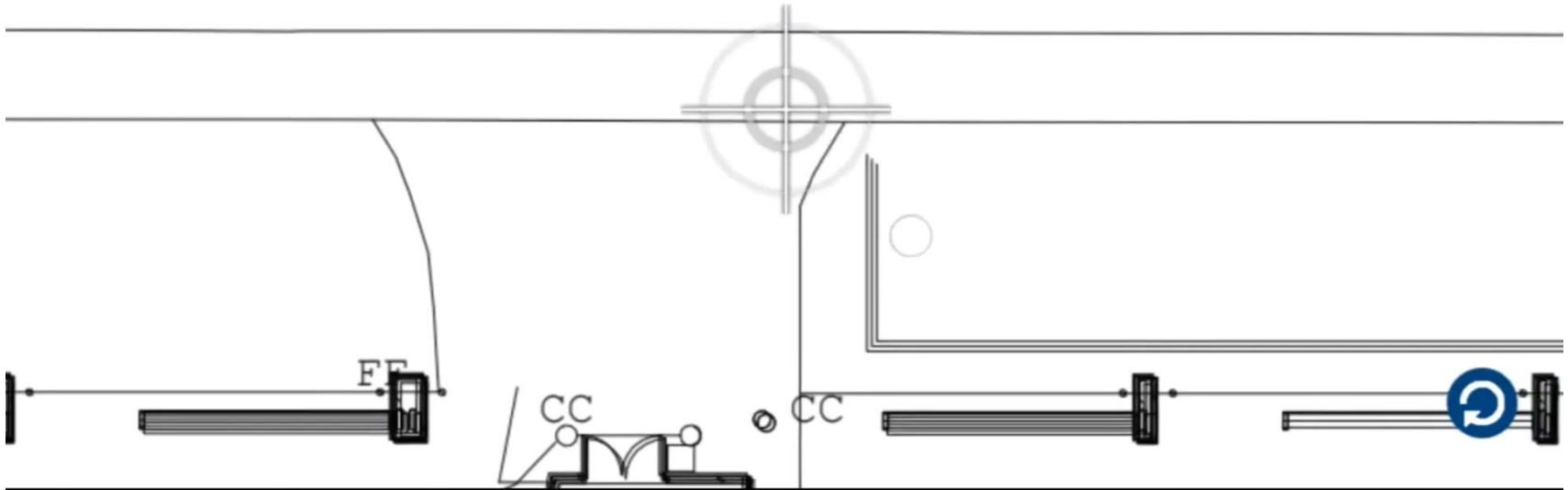
Step 1: Select First Plan Point



Select a first point on your plan.

Back

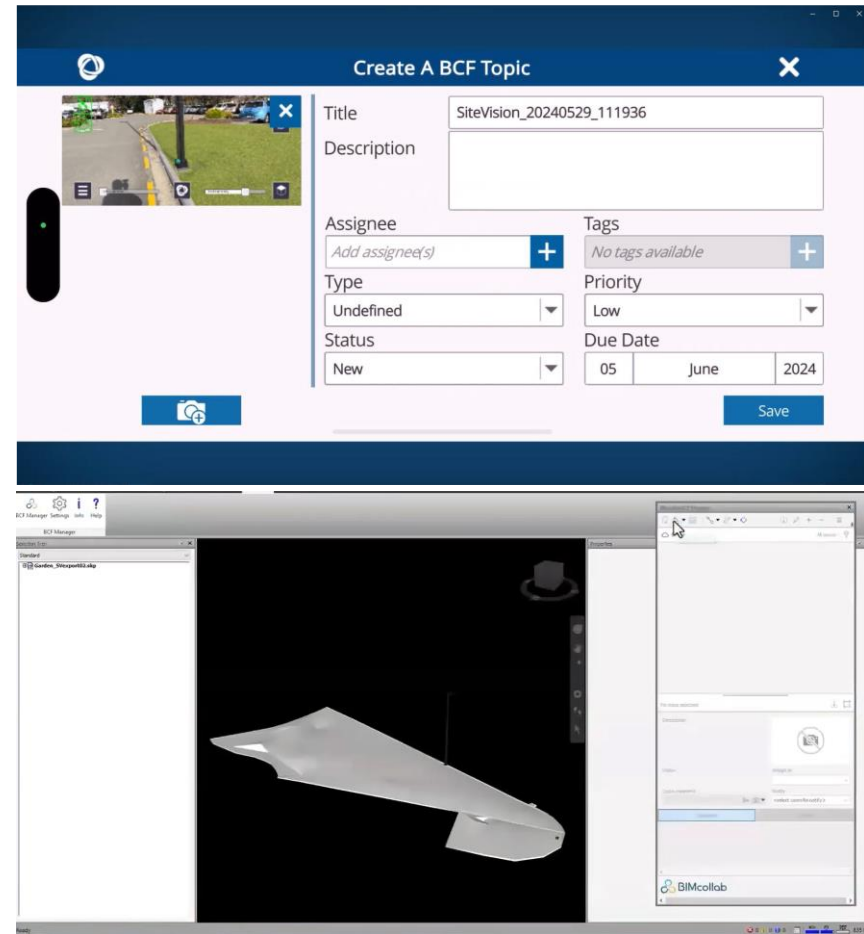
Measure



BCF Topics

Open Source Collaboration

- Replaces and **upgrades** existing **ToDo** functionality
- **Industry standard** schema to capture and share issues
- Instantly navigate to the captured **3D viewpoint** inside Connect model viewer
- Export options
 - **PDF** Report
 - **BCF** file for collaboration via 3rd party applications





GeoKARTO 2024

5. - 6. SEPTEMBER 2024 | STARÁ LESNÁ

Thank you for your attention

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