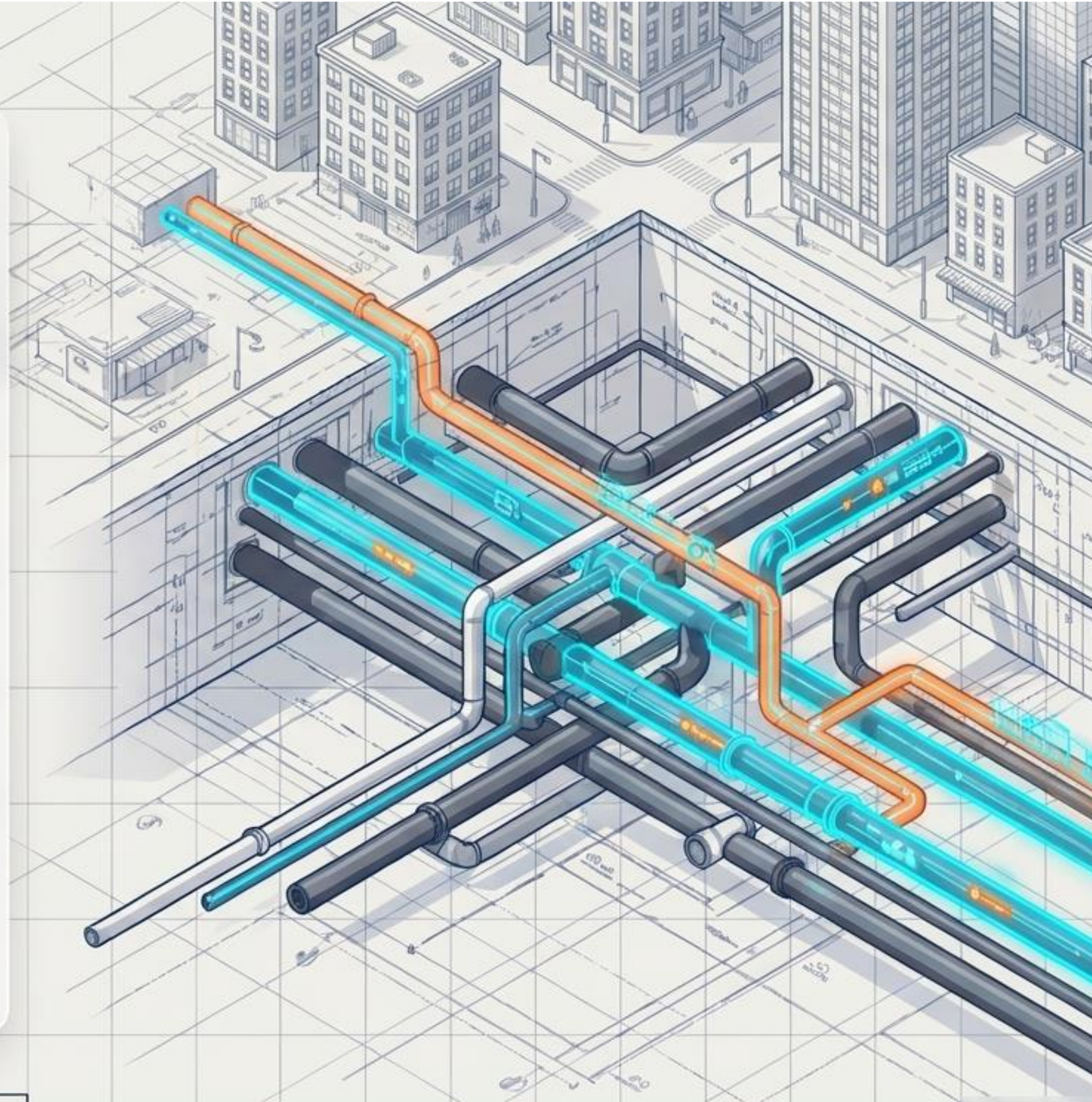
Verified. Trusted. Reused.

Redefining utility mapping for the digital infrastructure lifecycle.

Rethinking utility data across the infrastructure lifecycle with today's technologies.



$30 Billion worth of utility damages reported in the 2023 CGA DIRT Report.

~$10 Billion estimated annual spend locating underground infrastructure prior to excavation.

500,000+ annual utility damage incidents in the United States.

Bad data equals bad results. These numbers are the costly symptoms of disconnected, temporary workflows across the infrastructure lifecycle.

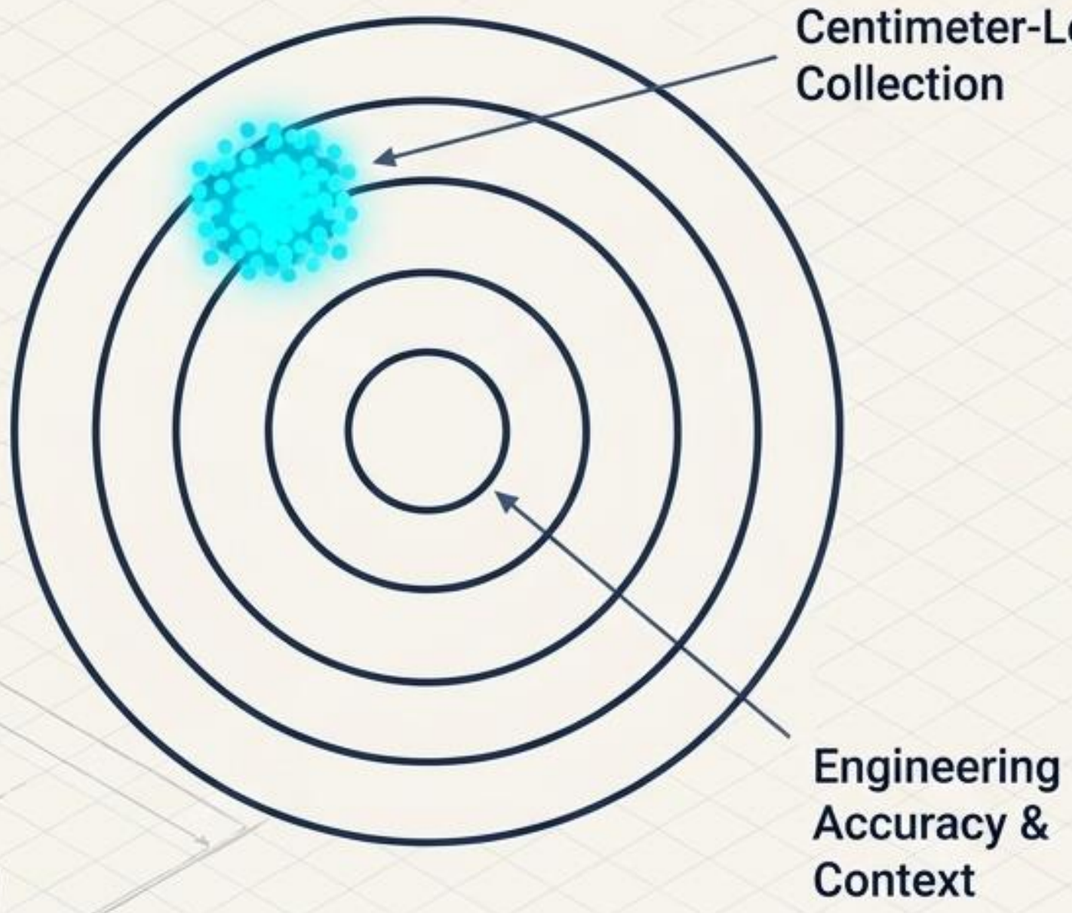
“...we’ve always done it this way...”

The traditional utility data bottleneck.

- Excel sheets and PDF maps aren't geospatially compliant.
- Non-survey locating teams lack real-time RTK mapping capabilities.
- More crews on site means data is delayed, incomplete, or non-standardized.

The "We've always done it this way" problem makes data **UNRELIABLE.**

Precision does not equal trust.

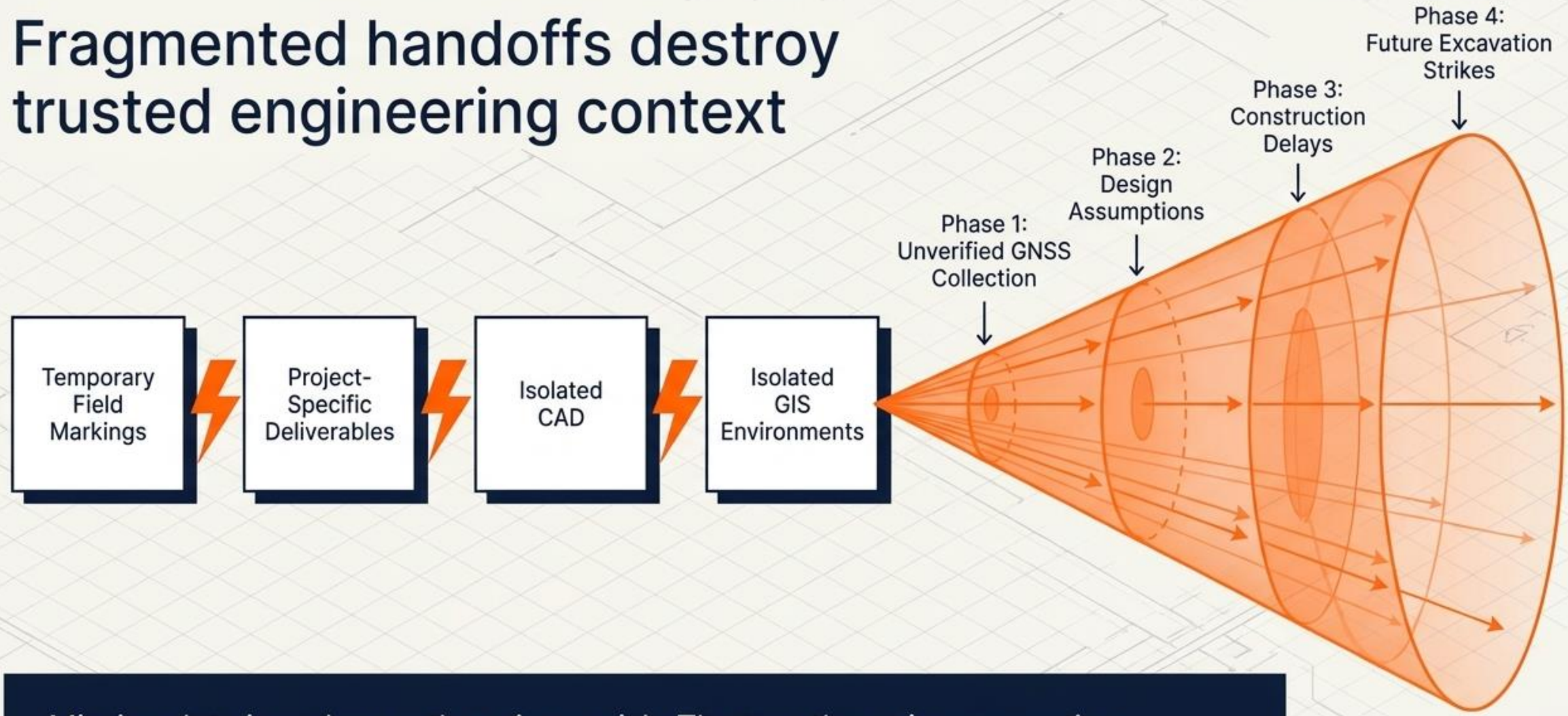


The False Precision Trap

Persistent utility data alone is not enough.

- The Illusion: Modern GNSS systems easily display centimeter-level precision during collection.
- **The Reality:** Without engineering governance, this creates the appearance of precision while introducing massive downstream operational risk

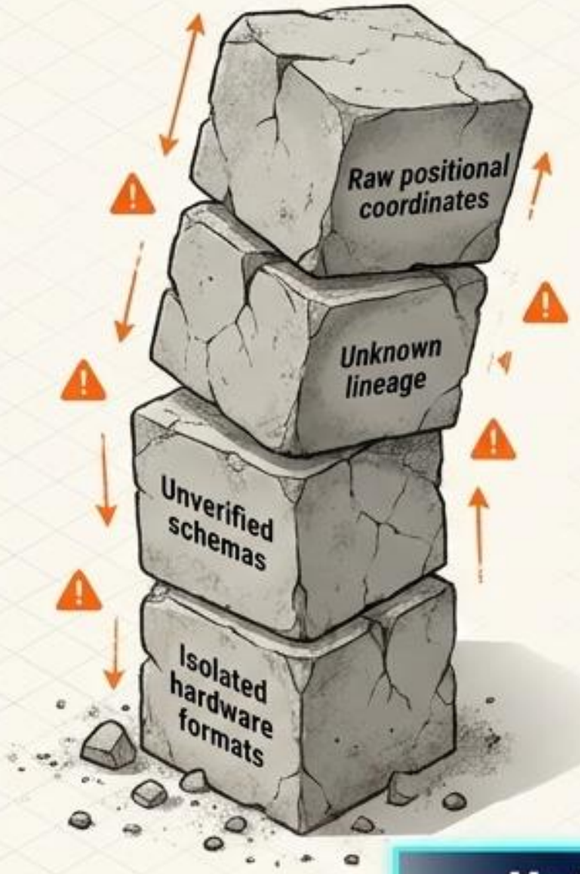
Fragmented handoffs destroy trusted engineering context



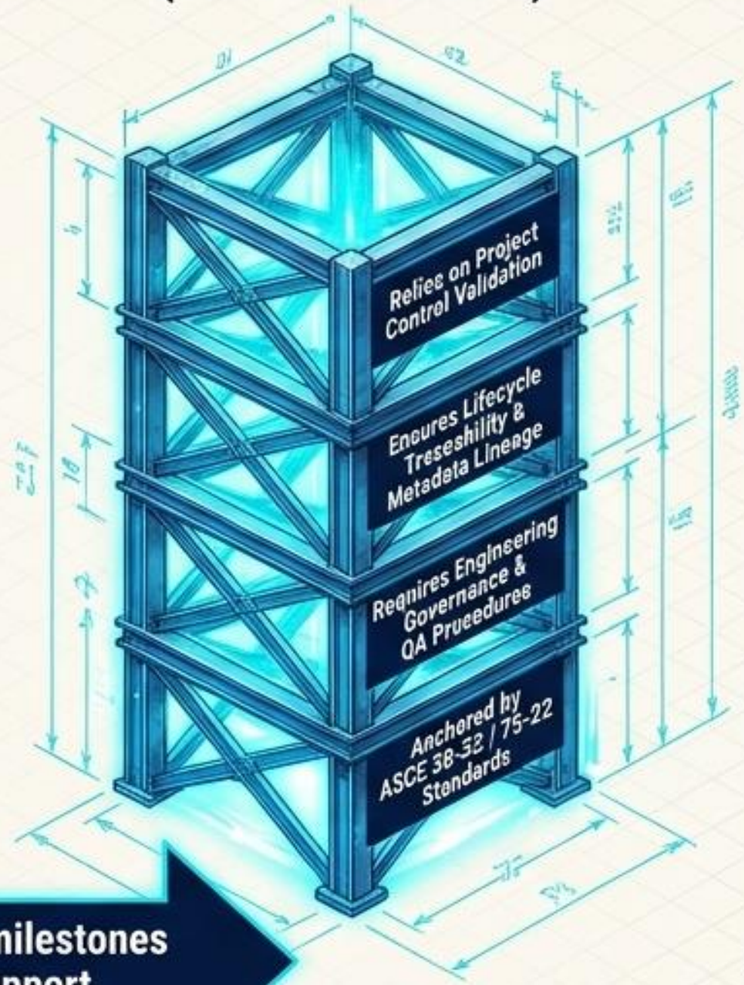
Missing data is no longer the primary risk. The true threat is propagating unverified, highly-precise uncertainty across infrastructure ecosystems at scale.

ASCE 38-22 and 75-22 establish the foundation for trusted intelligence.

Persistent Data (Unverified)



Trusted Intelligence (The New Mandate)



Moving from stop-and-start project milestones to geolocation-based lifecycle support.

The infrastructure paradigm is shifting from isolated hardware to interoperable data.

	The Old Way	The New Way
Foundation	Hardware-Defined (Isolated)	Data-Defined (Interoperable)
Nature of Data	Temporary project documentation	Continuously managed infrastructure intelligence
Collection & Sync	Manual CAD/GIS translation	Convergence of RTK-enabled GNSS, mobile collection, and cloud sync
Scope	Stop-and-start project milestones	Lifecycle support (planning, engineering, construction, maintenance)

Reliable RTK-capable locating & mapping tools.

A modernized locate team utilizes an open ecosystem of affordable hardware.

The Power of Modernization

- **Real-Time Data Collection**
  = Instant QA/QC processing
- **Geospatial Proof**
  = Reports, photos, and legal protection
- **Data Standardization**
  = Less error in the data exchange
- **Better Deliverables**
  = Winning more bids

Modern ecosystems solve the Cable TV problem.

Legacy Systems (The Cable Bundle)

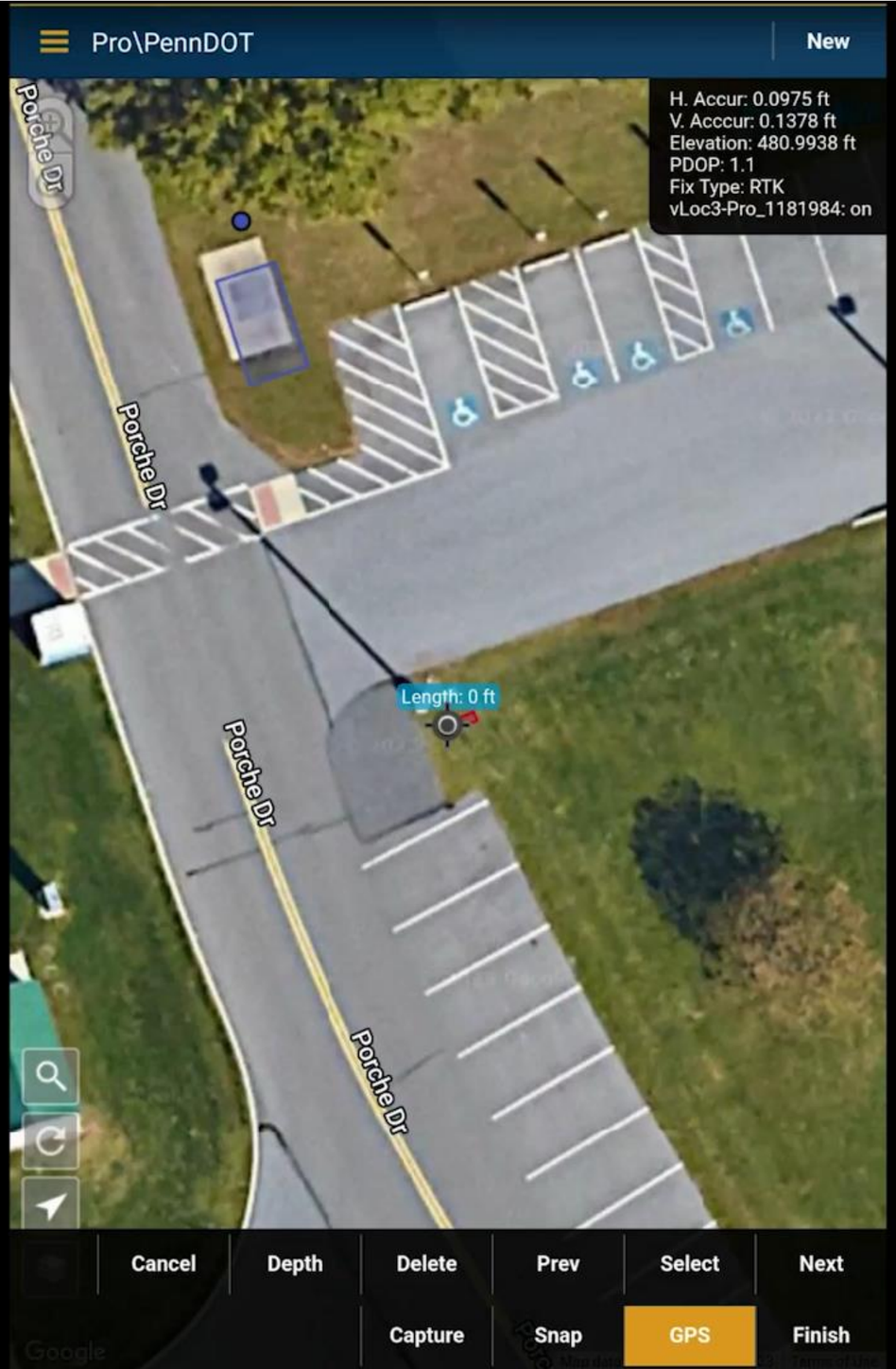
Highly technical, proprietary systems full of complex features locating teams don't need. They bottleneck data processing and trap data in CAD/GIS/Paper silos. You pay for 200 channels but only watch 5.

Modern Systems (The Streaming App)

Open, flexible, and affordable. Mobile and cloud-based tools allow teams to mix-and-match hardware. Neutral interoperability layers bridge fragmented environments, providing immediate SUE-compliant data ready for CAD/GIS.

The smartphone acts as the central interoperability layer.

- Hardware-agnostic: Connects to your preferred RTK-capable locators and GNSS tools.
- Instantly bridges field hardware and enterprise engineering systems.
- Generates immediate SUE-compliant data ready for your ecosystem.


Pro\PennDOT
New
H. Accur: 0.0975 ft
V. Acccur: 0.1378 ft
Elevation: 480.9938 ft
PDOP: 1.1
Fix Type: RTK
vLoc3-Pro_1181984: on
Porche Dr
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Length: 0 ft
Cancel
Depth
Delete
Prev
Select
Next
Capture
Snap
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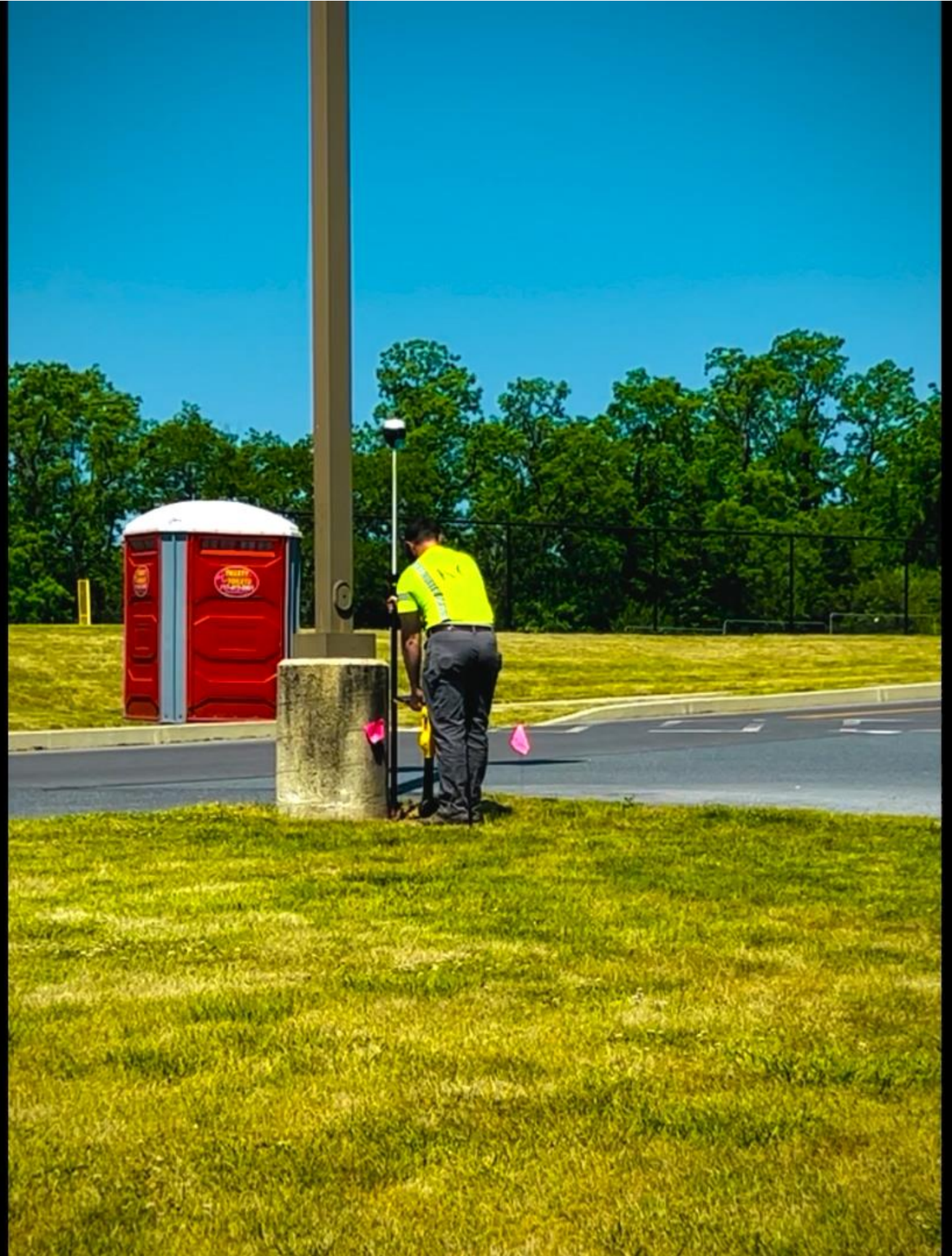
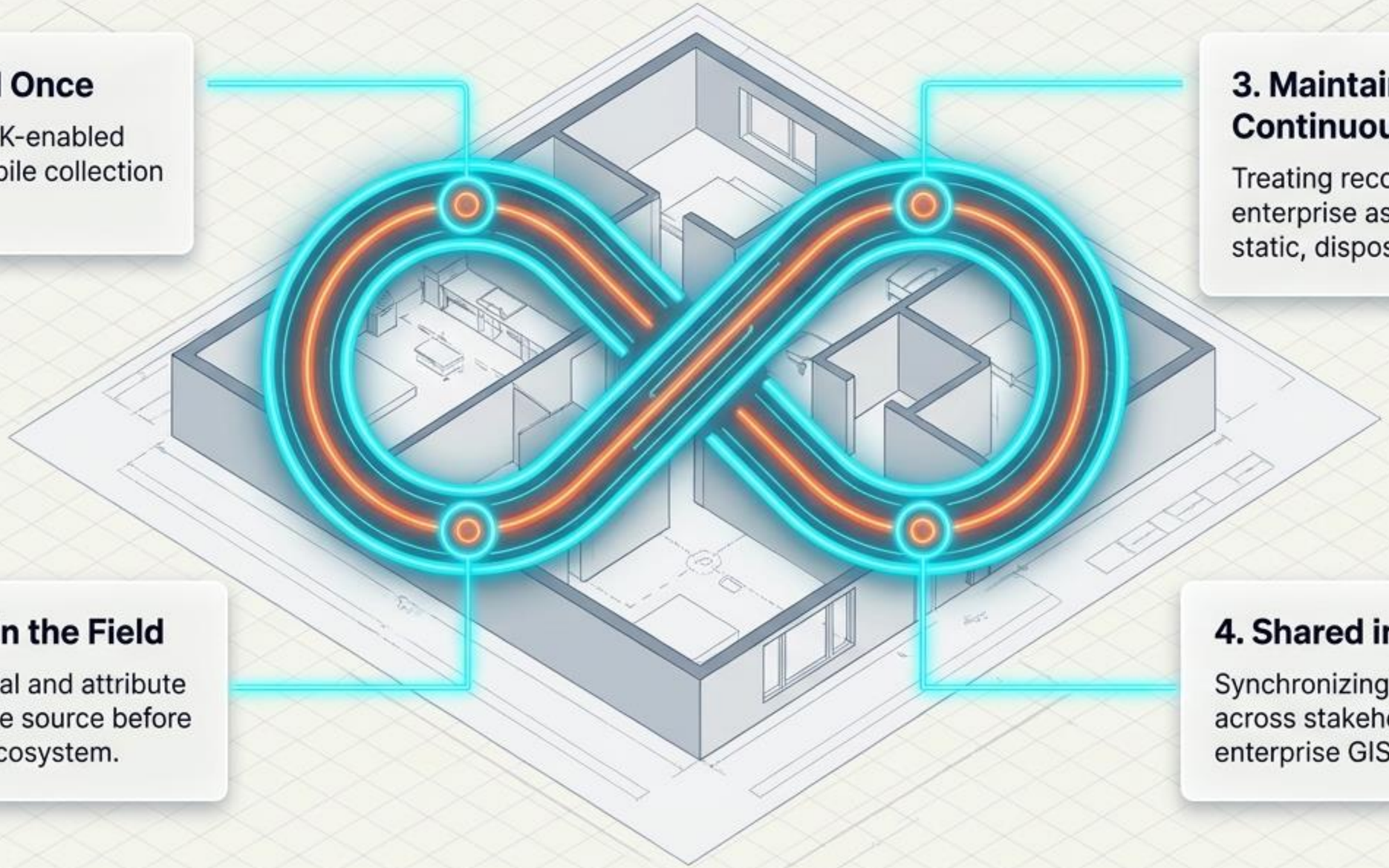
Finish



The four pillars of utility intelligence

1. Captured Once

Leveraging RTK-enabled GNSS and mobile collection in the field.



3. Maintained Continuously

Treating records as living enterprise assets, not static, disposable files.

2. Verified in the Field

Ensuring spatial and attribute accuracy at the source before it enters the ecosystem.

4. Shared in Real Time

Synchronizing instantly across stakeholders and enterprise GIS systems.

Public Agency Adoption: Control of the Right of Way.

COLORADO
Department of Transportation

- Mandated 2020 ASCE 38/75 data requirements for work within any CDOT Right of Way.
- Utilizes a single statewide mobile & cloud RTK-enabled GIS mapping tool for live QA/QC of utility data.
- Enables CDOT to give access to RTK georeferenced CAD & GIS records to any vendors in the field.

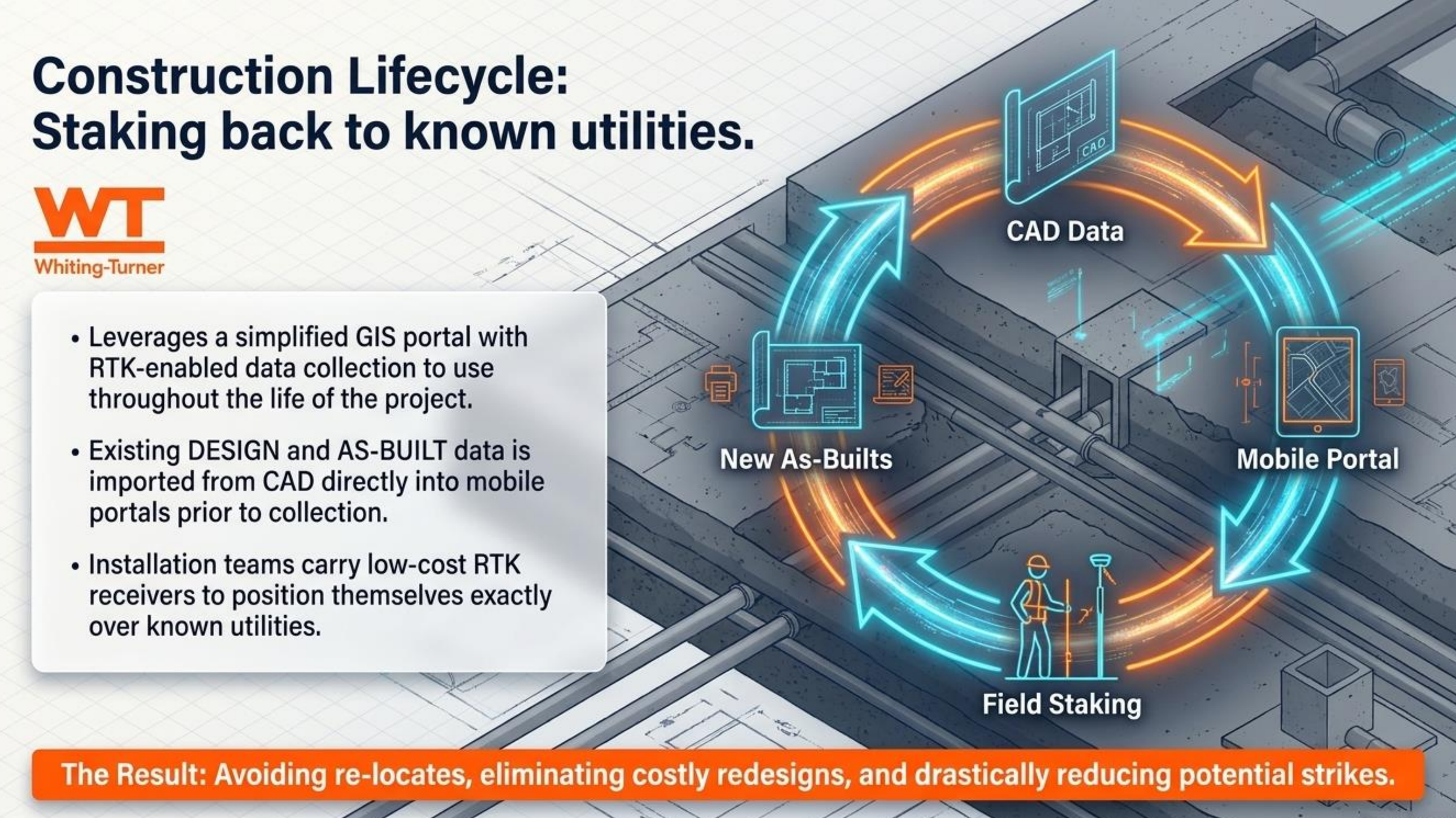
93%

Utility strike reduction achieved on initial pilot project.

Construction Lifecycle: Staking back to known utilities.

Whiting-Turner

- Leverages a simplified GIS portal with RTK-enabled data collection to use throughout the life of the project.
- Existing DESIGN and AS-BUILT data is imported from CAD directly into mobile portals prior to collection.
- Installation teams carry low-cost RTK receivers to position themselves exactly over known utilities.



The Result: Avoiding re-locates, eliminating costly redesigns, and drastically reducing potential strikes.

SUE & Engineering: Winning bids with better deliverables.

EMGEN
EM GENERAL ENGINEERING, INC

General Engineering

CHALLENGE

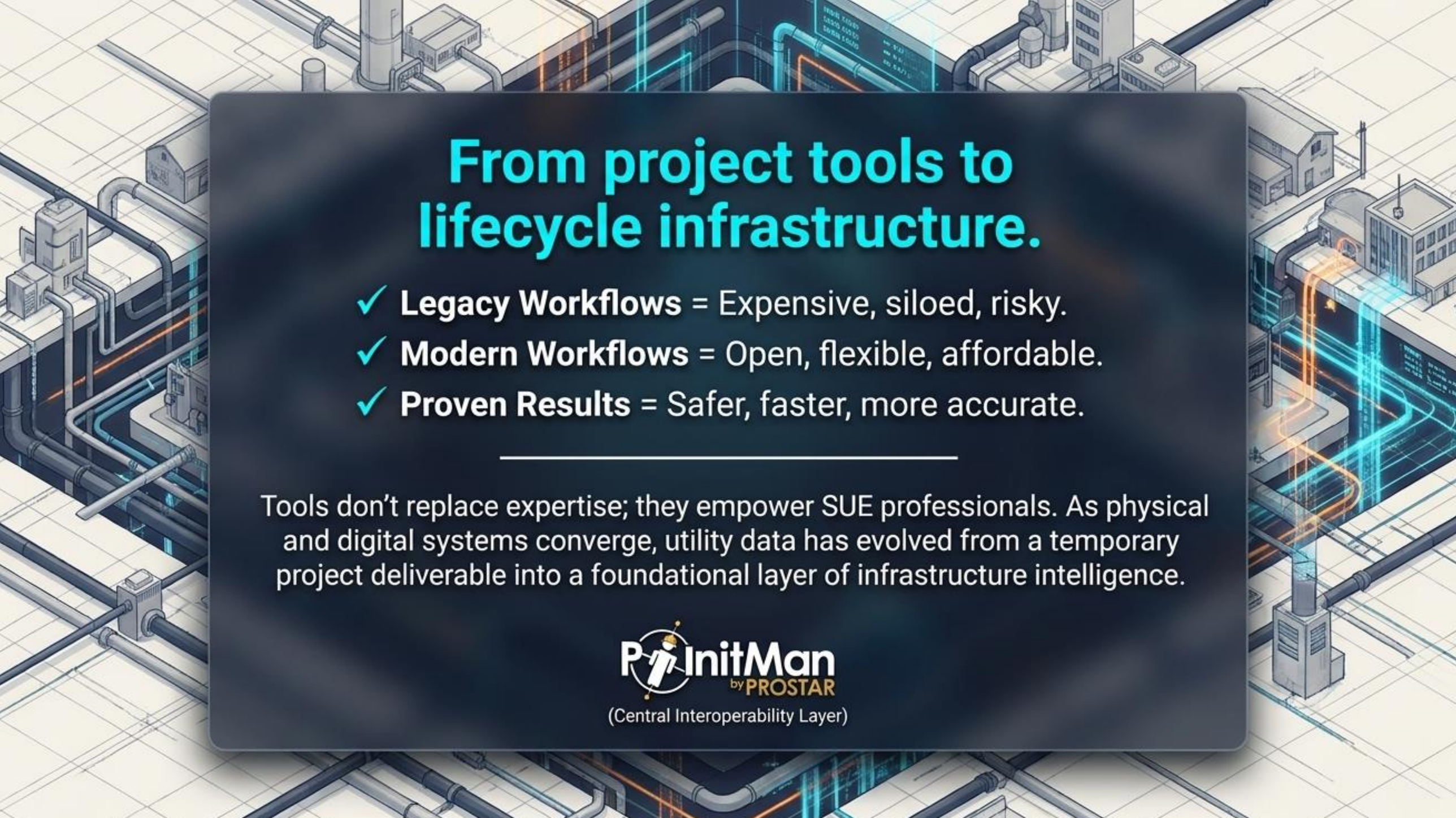
Legacy tools limited innovation. Deliverables often lacked context and engagement for clients, struggling with complex projects.

SOLUTION

Adopted an open-source RTK-GIS system as their central 'LocateOS.' Enabled real-time, field-to-office sync for dynamic deliverables.

RESULTS

Won major contracts (CalTrans, Teichert) by providing enhanced deliverables with video and data narratives. Building a new recurring value model.


From project tools to lifecycle infrastructure.
✓ Legacy Workflows = Expensive, siloed, risky.
✓ Modern Workflows = Open, flexible, affordable.
✓ Proven Results = Safer, faster, more accurate.
Tools don’t replace expertise; they empower SUE professionals. As physical and digital systems converge, utility data has evolved from a temporary project deliverable into a foundational layer of infrastructure intelligence.
PointMan by PROSTAR
(Central Interoperability Layer)