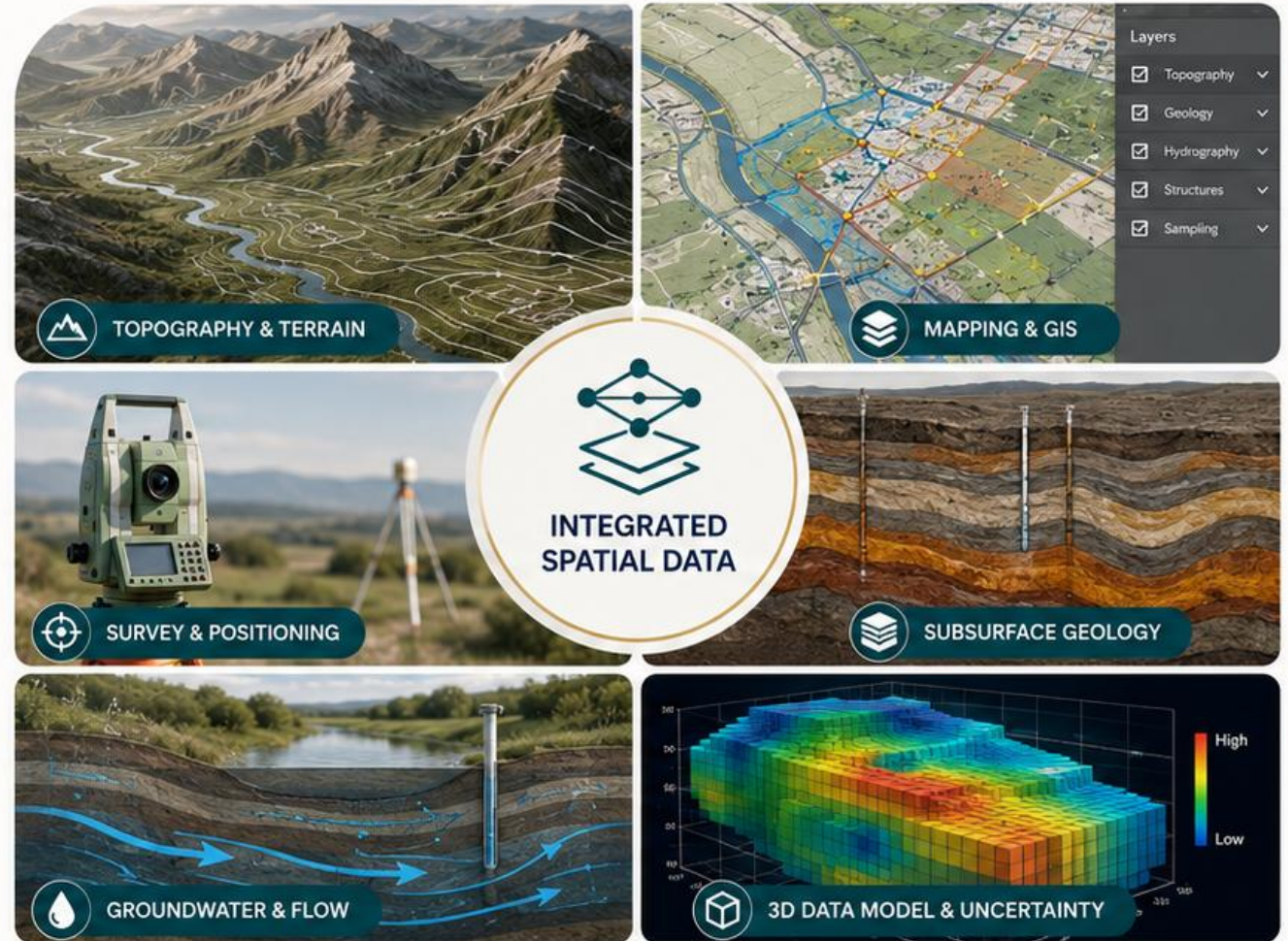


# Albian-Geo

## Spatial Data Geoscience for Better Project Decisions

“ The first benefit of investigation is not increased confidence, but removal of false confidence. ”

Albian-Geo supports projects where geology, groundwater, survey control, spatial data and uncertainty directly affect design, investment, environmental risk or operational decision-making.



### Better-controlled data

Accurate, consistent and traceable spatial data you can rely on.



### Better technical interpretation

Integrated geology, hydrogeology and spatial analysis for real insight.



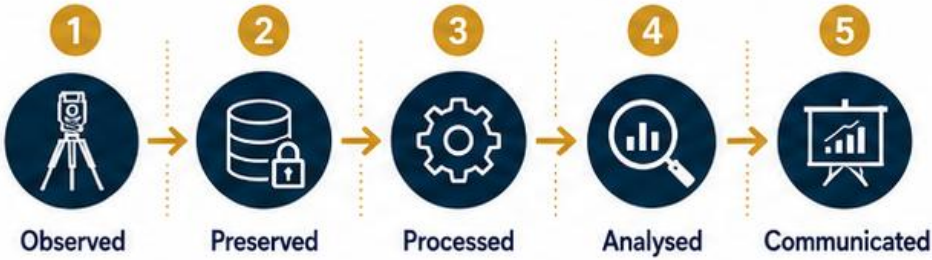
### Better project decisions

Lower risk, stronger outcomes and greater value at every stage.

# What is Geo-spatial Data?

From observed location-based data to defensible spatial understanding

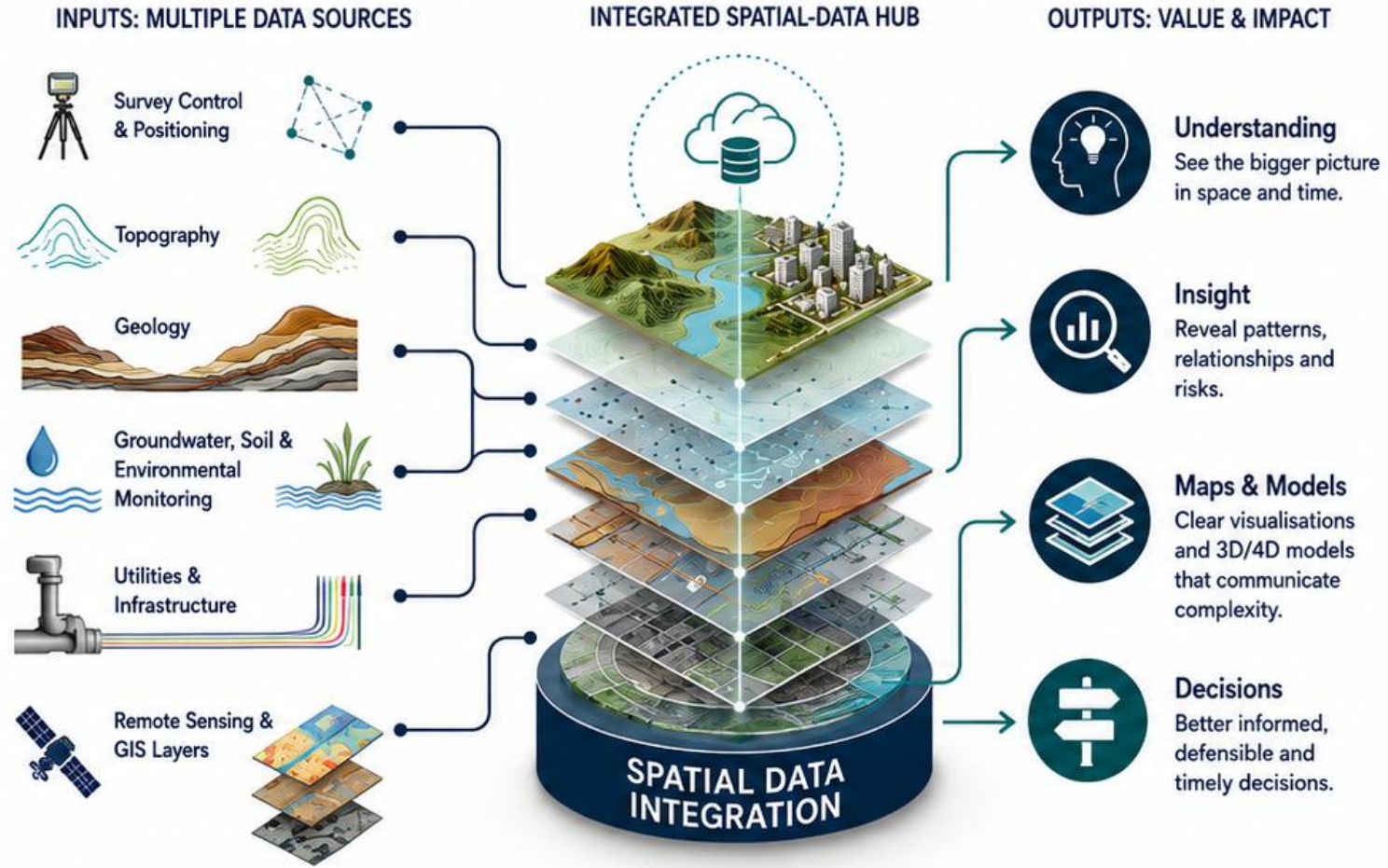
Geo-spatial data is data tied to location. When it is attributed, organised and interrogated, it becomes information that helps visualise and understand complex 3D and temporal situations.



Reliability depends on:

- Quality of sampling
- Quality of position
- Quality of attribution
- Relevance of the data

Correct positioning in the correct coordinate reference system is imperative.



The first benefit of investigation is not increased confidence, but removal of false confidence.



# The Client Problem

Most projects do not suffer from a lack of data — they suffer from poorly integrated data.



Fragmented survey, GIS, geological and environmental datasets



Unclear coordinate systems and datums



Legacy records difficult to verify



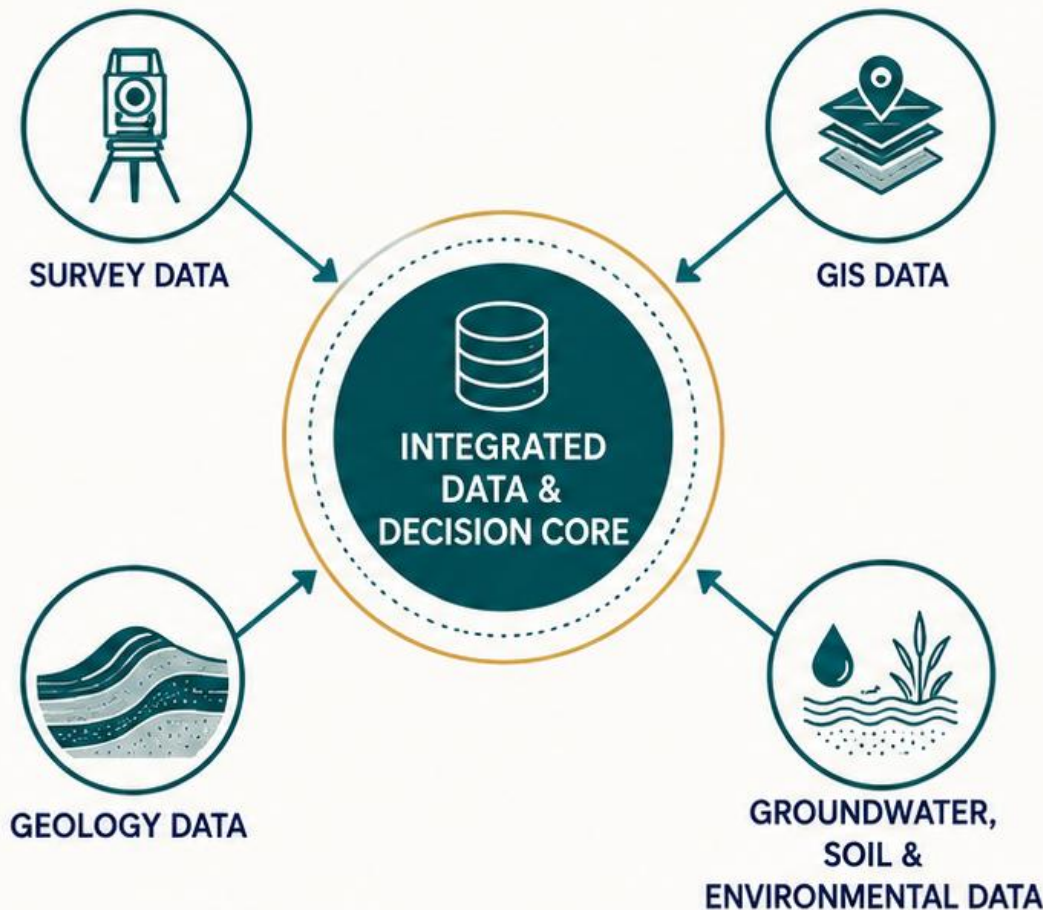
Sparse or biased ground and environmental data



Maps and models that look precise but hide uncertainty



Technical findings not translated into decisions



“

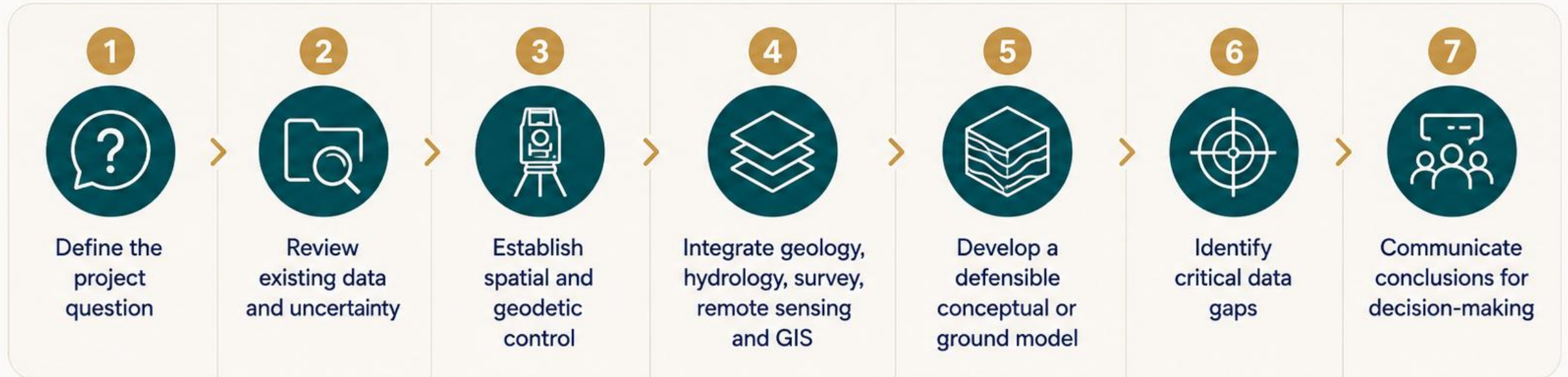
Albian-Geo helps convert fragmented technical data into defensible project understanding.

”



# How Albian-Geo Works

Integrated geoscience + geomatics + spatial data



“

The aim is not simply to produce maps. The aim is to produce usable project intelligence.

”

# Example: Al-Teeb Development, Iraq

Water security, flooding, recharge and environmental risk in an arid-region development



Catchment hydrology and seasonal river flow



Flood risk and overland flow pathways



Managed aquifer recharge potential



Groundwater availability and water quality



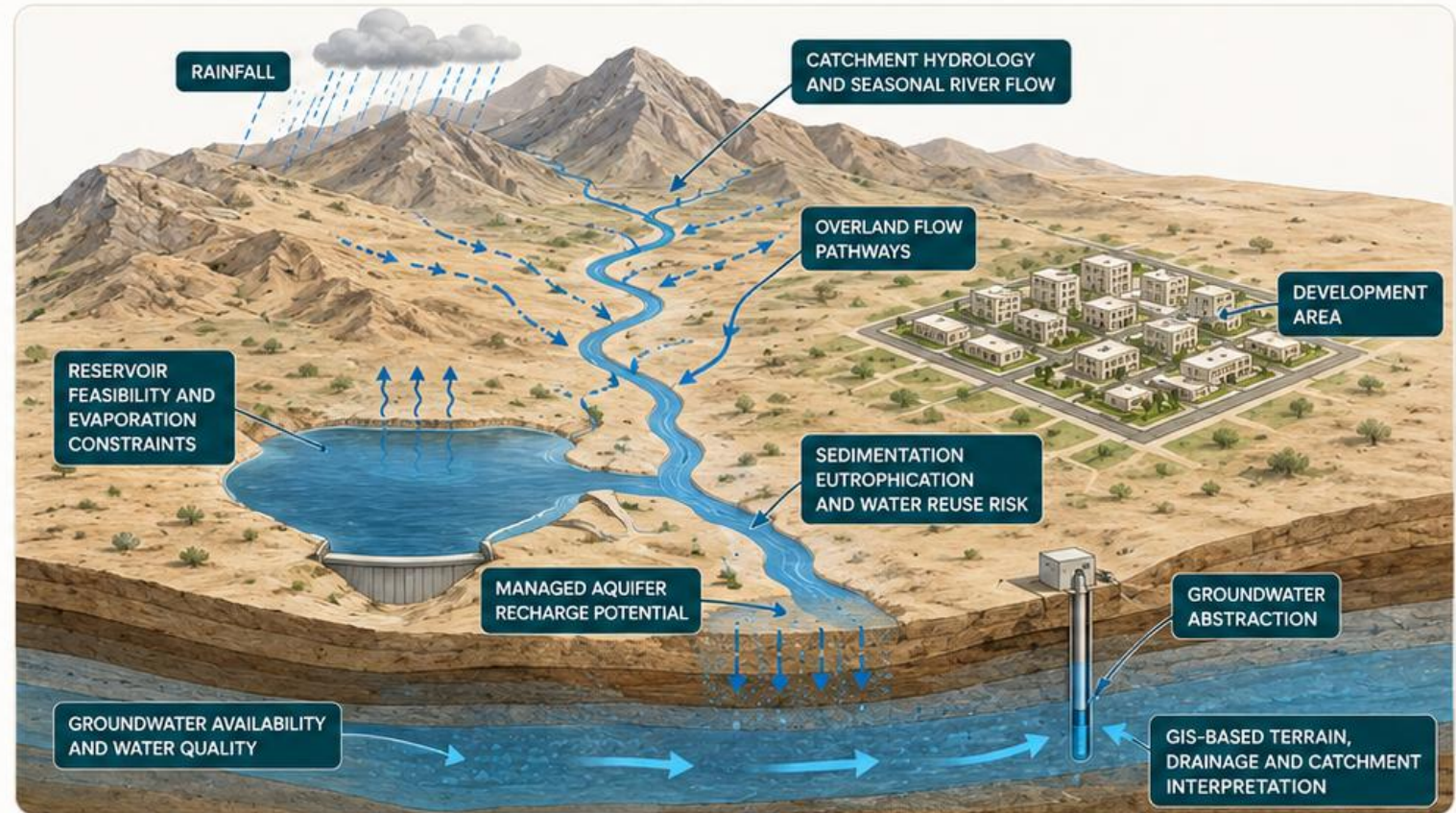
Reservoir feasibility and evaporation constraints



Sedimentation, eutrophication and water reuse risk



GIS-based terrain, drainage and catchment interpretation



“

**Client value:** A complex water-resource and development problem is converted into a structured technical framework for investigation, design and risk management. ”

# Example: Kuwait Bay / Doha Port Site Characterisation

Feasibility-stage investigation planning for shallow coastal development



Desk study and data gap review



Bathymetry, shoreline and tidal datum control



Nearshore geotechnical investigation planning



Shallow-water geophysics and intrusive ground investigation



Existing infrastructure, utilities and port-operations constraints



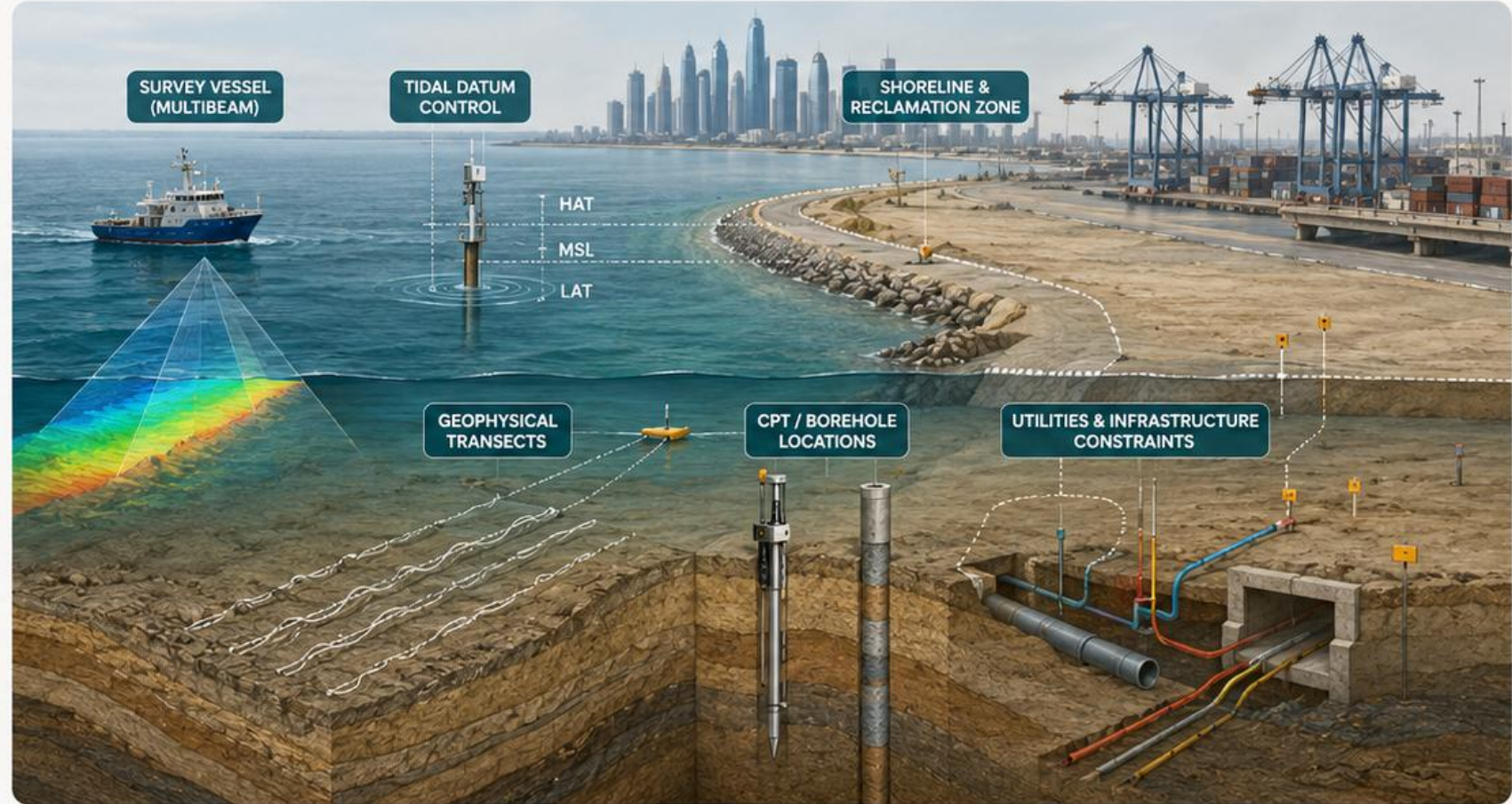
Dredging, reclamation and dredged-material reuse



Environmental receptors, water quality and marine archaeology



GIS-based data handling for stakeholder review



“

**Client value:** Investigation is structured to support design options, reduce uncertainty and avoid premature commitment to an unsuitable concept.



# Example: Underground Utility Study

ALBIAN-GEO

Reducing buried-service uncertainty through records, detection, verification and spatial control



Utility record review and uncertainty screening



Surface detection using EML and GPR



Geospatial control and survey integration



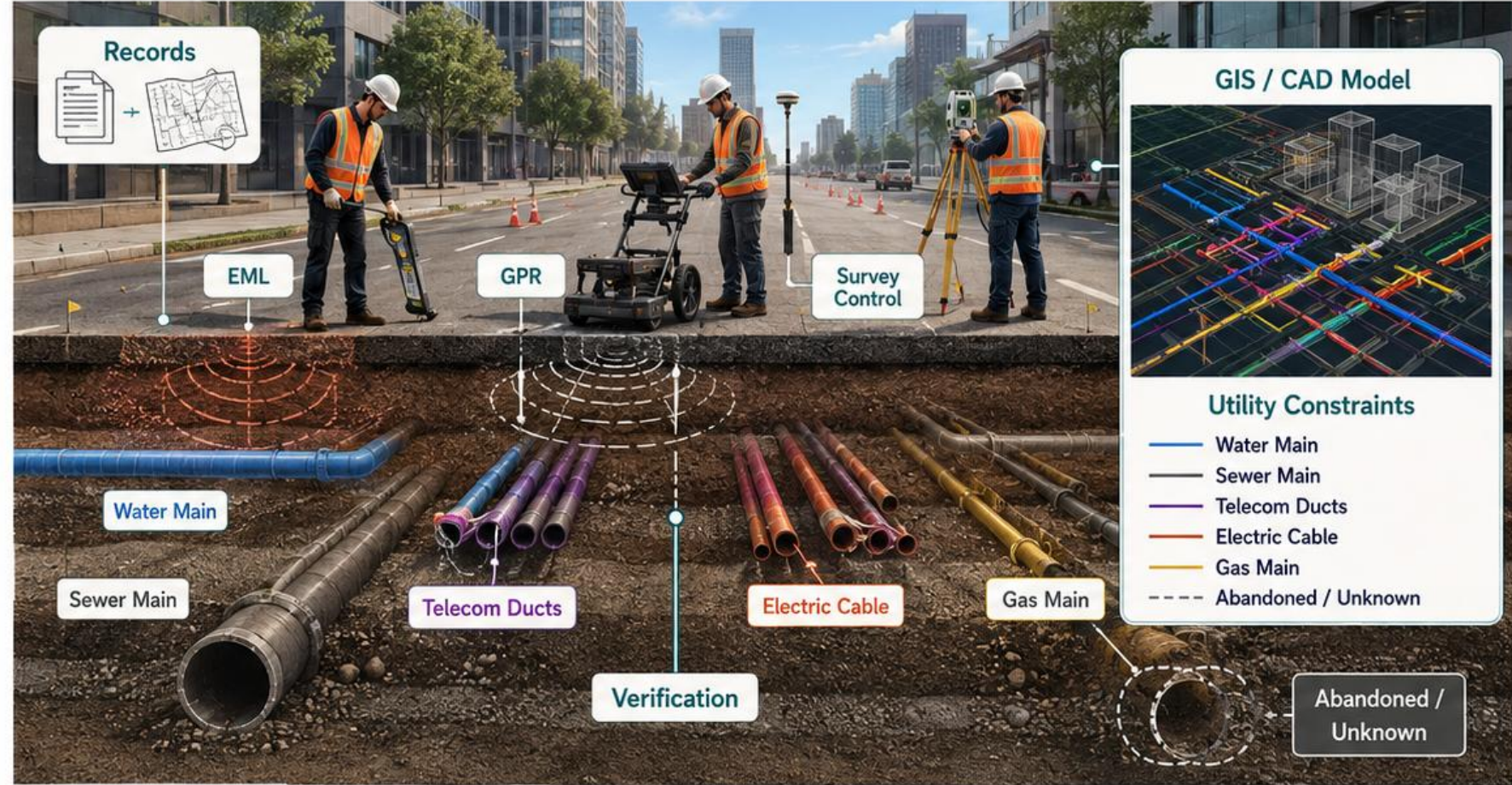
Verification and conflict resolution



GIS / CAD data capture and attribution



Risk-based interpretation for design and excavation planning



“

**Client value:**

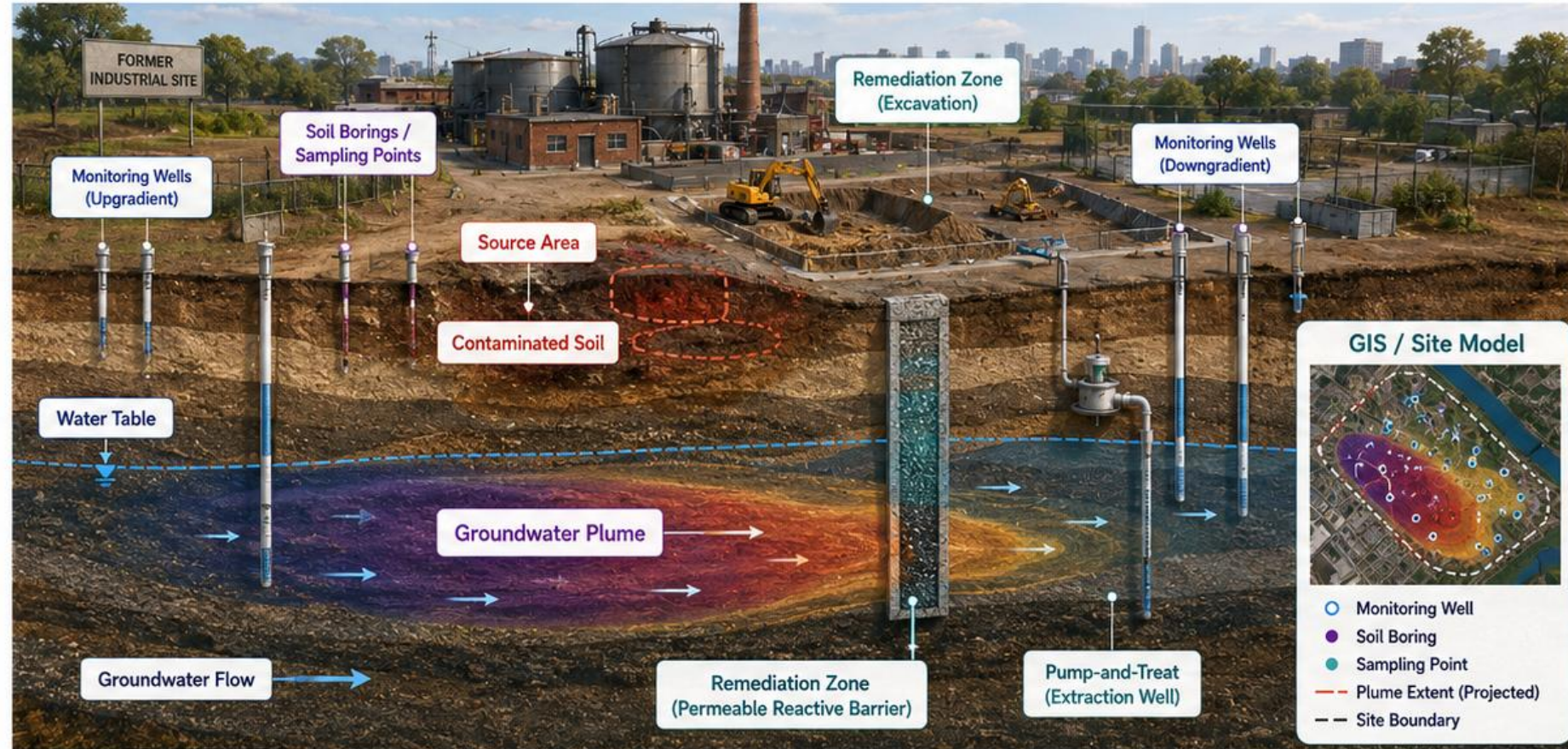
Buried utility uncertainty is converted into a structured, defensible spatial understanding that reduces design conflict, excavation risk and rework.

”

# Example: Contaminated Land, Soil and Groundwater Remediation

Integrating contaminated-land investigation, aquifer characterisation and remediation planning

-  Contaminated land desk study and conceptual site model
-  Soil and groundwater sampling strategy
-  Source-area and contaminant-plume delineation
-  Aquifer characterisation and monitoring wells
-  Source-pathway-receptor assessment
-  Risk-based remediation planning and validation monitoring
-  Environmental data integration into GIS / CAD



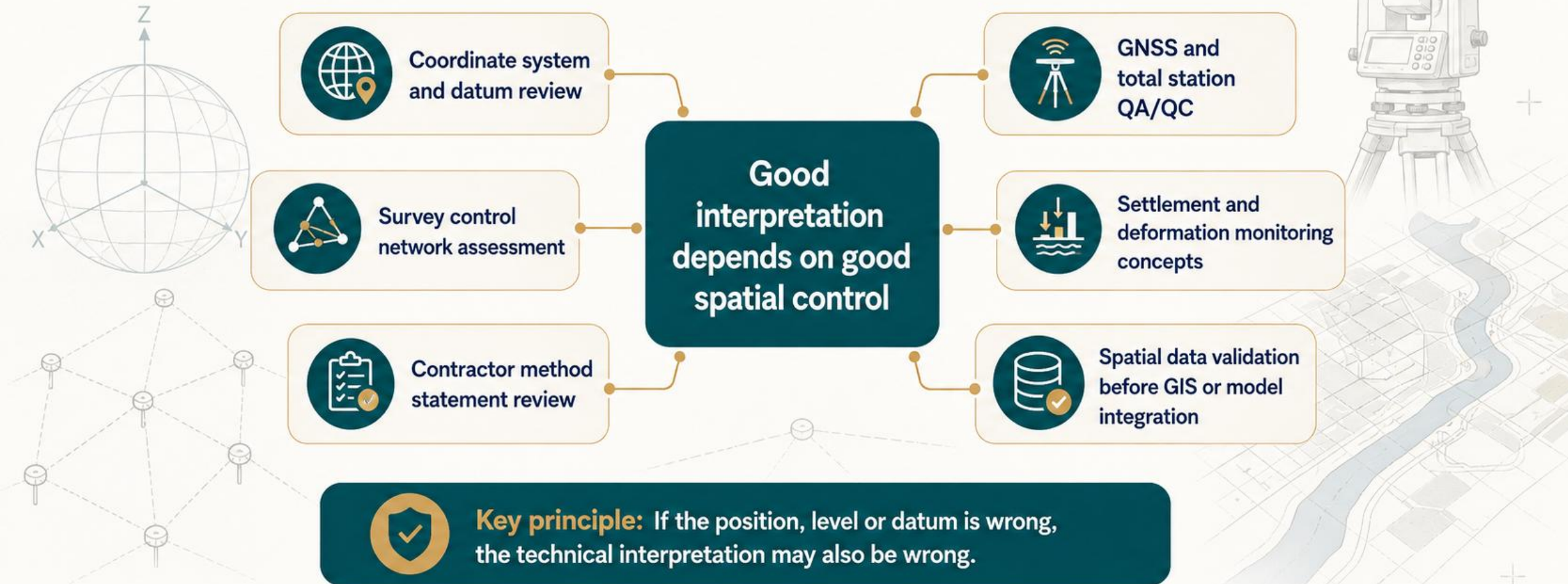
“ Client value:

Contaminated soil and groundwater uncertainty is converted into a defensible spatial risk model that supports investigation, remediation, monitoring and regulatory decision-making.

”

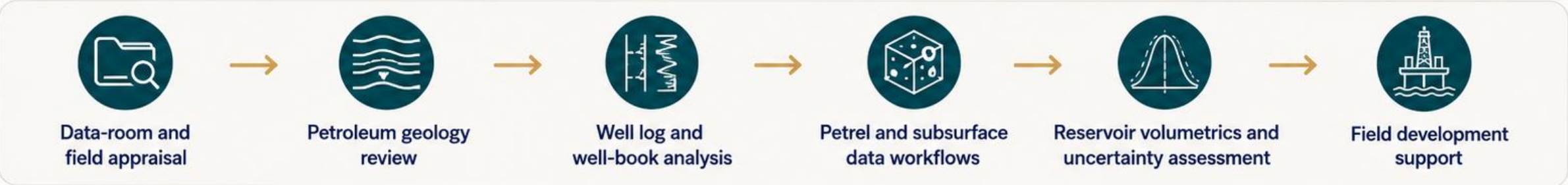
# Example: Geomatics and Survey Control

Good interpretation depends on good spatial control

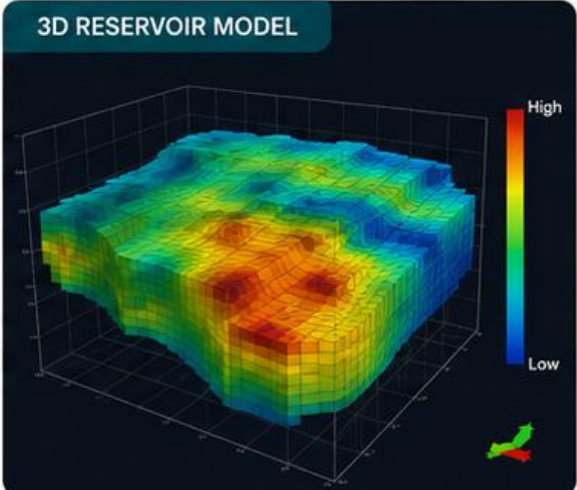
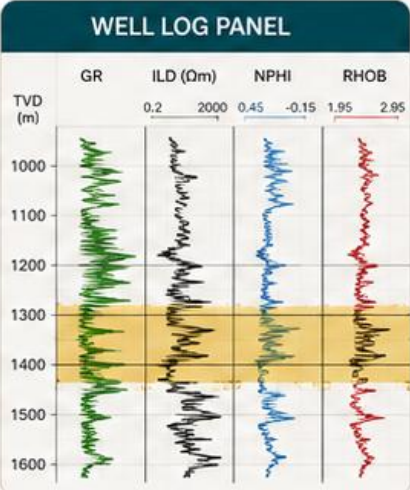
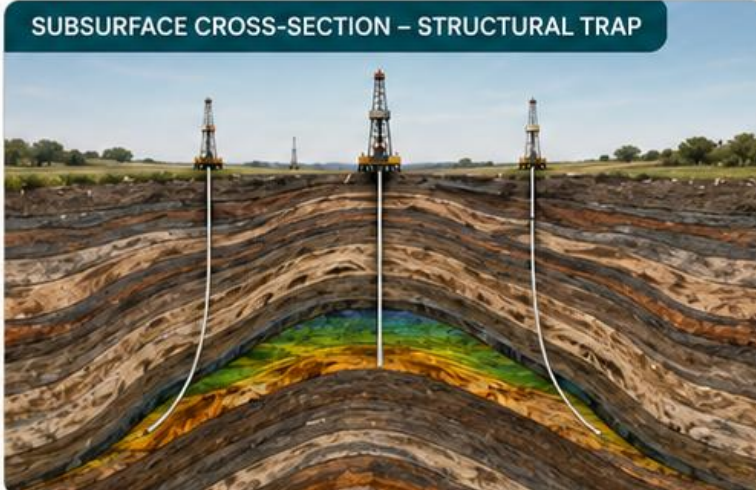


# Example: Subsurface and Petroleum Geoscience

From legacy subsurface data to field-scale understanding


















- Heavy oil experience
- Integration of geological, geophysical, petrophysical and production data
- Legacy data recovery



“ **Client value:** Legacy and fragmented subsurface data are converted into a clearer view of opportunity, uncertainty and development risk. ”

# What Makes the Approach Different

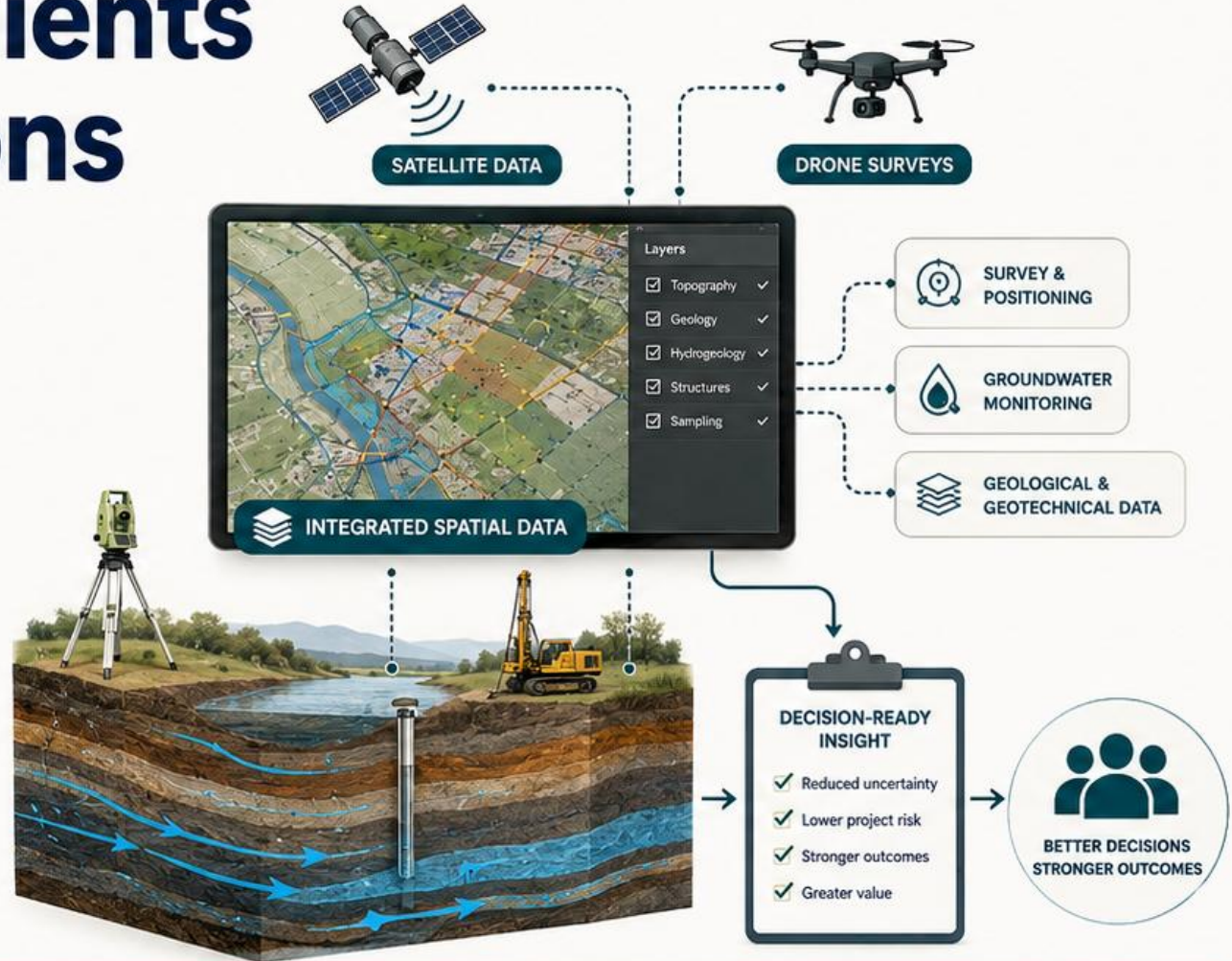
Albian-Geo is strongest where disciplines overlap

Project interface	Typical risk	Albian-Geo contribution
 <b>Survey and GIS</b>	 Wrong datum or coordinate assumptions	 Spatial control and validation
 <b>Geology and design</b>	 Oversimplified ground model	 Geological and geomorphological interpretation
 <b>Hydrology and planning</b>	 Underestimated flooding or recharge uncertainty	 Catchment and water-balance thinking
 <b>Environment and development</b>	 Unclear source–pathway–receptor links	 Hydrogeological and environmental screening
 <b>Data and decisions</b>	 Data exists but is not usable	 Structured technical synthesis

# Albian-Geo helps clients make better decisions

From uncertain ground, water and spatial data to decision-ready understanding

- ✔ Bring order to fragmented technical datasets
- ✔ Improve spatial and geodetic reliability
- ✔ Build defensible geological and hydrogeological interpretations
- ✔ Identify uncertainty before it becomes project risk
- ✔ Support investigation planning and contractor review
- ✔ Communicate complex evidence clearly to stakeholders



**Albian-Geo — Spatial Data Geoscience for projects where location, ground conditions, water and uncertainty matter.**

“ The first benefit of investigation is not increased confidence, but removal of false confidence. ”