



Registered Interests on Titled Land (RITL) Benchmark Project: MNC Delivers Proof of Concept for Spatial Mapping of Registered Land Interests in Alberta

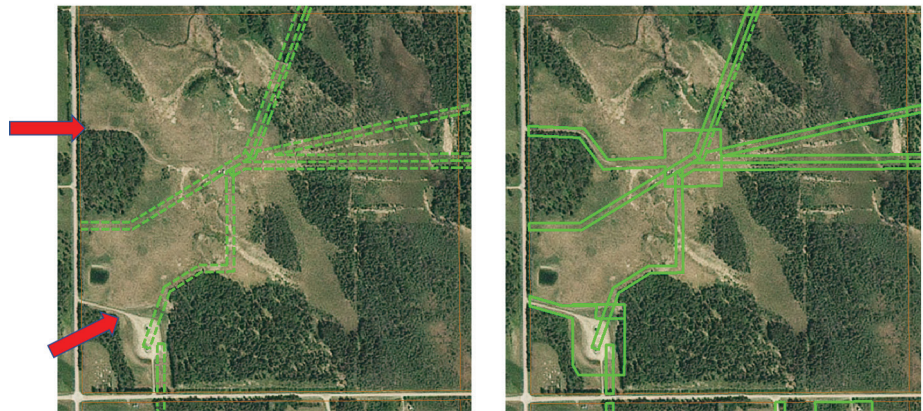
In Alberta, a range of legal interests, such as **Caveats, Rights of Way and Easements**, can exist on privately owned land. These interests are recorded on Alberta Land Title certificates, but they typically lack a spatial representation unless tied to a registered survey plan. This absence of spatial context poses challenges for land management, planning, and decision-making, particularly across government and industry sectors that rely on accurate geospatial data.

Recognizing the need to visualize these interests in a spatial format, **Alberta Data Partnerships (ADP)** worked with **MNC (Martin Newby Consulting Ltd.)** to undertake the RITL Benchmark Project in 2017. The goal was to assess the feasibility of creating a spatial dataset representing these land title interests, offering a starting point for broader engagement and future development.

CHALLENGE

Although these registered interests are legally documented on land titles, there is no standard spatial dataset for interests such as **Caveats, Rights of Way, and Easements**, unless they appear on registered plans of survey. This limits how effectively stakeholders, including industry, municipalities, and government, can assess, manage, or plan for these interests on private lands.

Landscape changes beyond survey plans can be seen in the ground scars



Cadastral Data

Cadastral Data and RITL Interests

KEY CHALLENGES INCLUDED:

- No spatial representation for non-surveyed title interests.
- Lack of tools or data to support informed engagement with industry and government stakeholders.
- Need for a foundational model to initiate discussions and gauge industry and government interest.

SOLUTION

To evaluate the potential for spatially representing title-based land interests, MNC conducted a focused Benchmark Project within a single Alberta township. MNC used coordinate geometry (COGO) methods to map a comprehensive set of interests, including caveats, utility rights of way, and easements, based on available land title records.

KEY STEPS IN THE SOLUTION:

TARGETED MAPPING SCOPE

- Selected one Alberta township as a pilot area for focused mapping.
- Included multiple interest types commonly found on land titles to demonstrate a variety of scenarios.

SPATIAL DIGITIZATION

- Mapped interests based on available documentation and parcel references.
- Created a visual baseline that accurately represented the spatial extent of registered interests not typically shown on plans of survey.

STAKEHOLDER ENGAGEMENT ENABLEMENT

- Designed the output as a tool to support engagement with both government and industry stakeholders.
- Used the mapped dataset as a conversation starter to explore the utility and potential future development of a broader RITL dataset.

By grounding the pilot in real-world data and MNC provided a proof of concept that highlighted the value of spatially enabling land title interests.

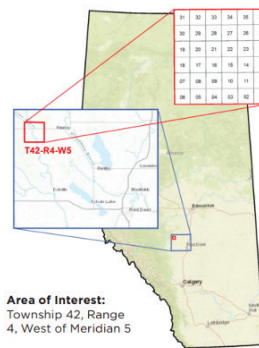
RESULTS

The RITL Benchmark Project successfully demonstrated that spatial representation of land title interests is both feasible and beneficial. It provided ADP with a practical foundation for conversations among stakeholders and has since been used to support engagement and strategic discussions with government, municipal, and industry partners.

KEY BENEFITS INCLUDE:

- **Proof of Concept for Spatial RITL Data:** Demonstrated the ability to map diverse land title interests in a geospatial format.
- **Stakeholder Engagement Catalyst:** Enabled more informed discussions with decision-makers by providing a tangible, map-based dataset.
- **Model for Future Expansion:** Created a template that can be replicated or scaled to other regions, supporting long-term geospatial data strategies.

Led by MNC, this initiative provided a critical first step toward closing the spatial information gap for registered interests on titled land in Alberta.



Alberta Energy Regulator (AER) Well Data shown with Mapped (RITL) Interests. The red points represent AER well data and the yellow lines represent the extent of the interest (RITL) mapped in the benchmark project.

MNC SERVICES & TECHNOLOGY USED

SERVICE CATEGORIES:

- Needs and Requirements Analysis
- GIS Strategy and Planning
- Data Model and Database Design
- Data Conversion and Migration
- Training and Support Services

TECHNOLOGY PLATFORM & TOOLS:

- ArcGIS (Esri)
- Bentley (MicroStation)



CONTACT US TODAY to discuss your geospatial needs.

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ABOUT MNC

The Cadastral and Parcel Mapping Experts



MNC is a trusted leader in cadastral and parcel management with 25+ years of experience delivering GeoAI-ready datasets, modernizing parcel fabrics, and automating GIS workflows. As an Esri Gold and Cornerstone Partner with a Parcel Management Specialty and State and Local Government Specialty, MNC provides scalable advanced GIS, ArcGIS Pro, FME automation, MicroStation, AutoCAD and cloud-ready geospatial systems that improve data quality and support government land administration modernization across Canada, the USA, and the Caribbean.

