Canadian utility discipline.
Built for Mexican infrastructure.

GIS, infrastructure records, and asset management consulting for utilities modernizing Mexico's grid, pipelines, and municipal networks.

The records problem most utilities don't talk about.

Aging infrastructure. Paper as-builts scanned into folders no one opens. GIS layers that don't match what's in the ground. Crews working from maps their supervisors don't trust. Regulators asking questions no one can answer quickly.

Every utility has a version of this problem. It shows up in outage response times, locate errors, failed audits, and capital projects that blow past budget because the data wasn't what the engineer thought it was.

WHERE THE COST SHOWS UP

Outage response
crews working from maps they can't trust

Locate accuracy
damage claims, regulatory penalties

Audit readiness
scrambling to reconstruct records for regulators

Capital projects
rework from unreliable baseline data

We fix this — systematically, auditably, and so your team can maintain it after we leave.

§ 02 / WHO WE ARE

A new firm. A seasoned practitioner.

Rainbow ACS Inc. was founded in 2025 in Mexico City to transfer the methodologies, governance, and field discipline of the Canadian utility industry to the utilities modernizing Mexico today.

The firm is new; the expertise behind it is not. The founder, Jose Barranco, was born in Mexico City and is an alumnus of Chapingo University. He continued his education in Canada, where he obtained two master's degrees and began his career at the Ministry of Natural Resources of Canada. He brings 25 years of hands-on engineering experience in Canadian natural-resources and utility contexts — with a focus on GIS, infrastructure records, and asset-management systems — now applied to the utilities and infrastructure operators modernizing Mexico.

25+
YEARS OF PRACTICE

3
CANADIAN SECTORS

MX·CA
BILINGUAL DELIVERY

01

GIS Systems

ArcGIS Enterprise, Utility Network, UPDM-aligned schemas, Python automation.

02

Infrastructure Records

Asset hierarchies, as-built workflows, paper-to-digital at scale.

03

Operational Integration

GIS to CMMS/EAM — Maximo and equivalents — governance that survives handover.

Three service lines. Seven offerings.

Each offering is scoped so a utility knows exactly what it's buying — and what it isn't.

A

LINE A

Data & Records

The foundation. Audits, digitization, and migration work that makes every downstream system possible.

OFFERINGS

→ GIS Data Audit & QA
→ Infrastructure Records Digitization
→ Data Migration — CAD / Legacy → ArcGIS

B

LINE B

Systems & Automation

Schema design, Python automation, and integration work between GIS and asset-management systems.

OFFERINGS

→ GIS Asset Database Design
→ GIS Automation & Scripting
→ GIS ↔ Asset Management Integration

C

LINE C

Advisory & Enablement

Training, fractional leadership, and retained advisory for utilities building internal GIS capability.

OFFERINGS

→ GIS Training Programs
→ GIS Advisory Retainer

Data & Records.

Three engagements that establish a trustworthy records foundation — typically the first work a utility commissions from us.

A1

3–5 WEEKS

GIS Data Audit & Quality Assessment

A structured review of an existing GIS dataset: topology errors, missing attributes, disconnected networks, duplicate assets, metadata gaps. Deliverable is a findings report with a prioritized remediation plan and sizing for the cleanup work.

BEST FOR: Best first step when a utility suspects data quality problems but can't quantify them.

A2

8–16 WEEKS

Infrastructure Records Digitization

Paper as-builts, field notes, and engineering drawings converted into structured GIS datasets — with topology, attribution, and metadata to an agreed standard. Scoped per asset class, per kilometer, or per zone depending on the engagement.

BEST FOR: Essential when paper archives hold authoritative information no digital system mirrors.

A3

6–14 WEEKS

Data Migration — CAD / Legacy → ArcGIS

Moving asset data out of AutoCAD, Excel, shapefiles, or older geodatabases into ArcGIS Enterprise or UPDM-aligned schemas. The transformation logic, topology rules, and QA routines are delivered alongside the data itself.

BEST FOR: Precedes or enables Utility Network migration, CMMS integration, or regulatory reporting upgrades.

Systems & Automation.

Technical engagements that make platforms work day-to-day — schema, scripting, and the integration layer between GIS and asset management.

B1

6–12 WEEKS

GIS Asset Database Design & Configuration

Asset hierarchy design, ArcGIS schema configuration, naming conventions, domains and subtypes, and the governance layer around them — calibrated to your asset types and regulatory reporting needs, not a generic template.

BEST FOR: Precursor to any larger modernization; foundational for utilities rationalizing legacy data models.

B2

SCOPED OR RETAINED

GIS Automation & Scripting

Python and geoprocessing tools for repetitive, error-prone work: bulk attribute updates, topology correction, network tracing, sync jobs, QA routines, reporting pipelines. Delivered as discrete tools or an ongoing retainer.

BEST FOR: Where internal teams lack scripting capacity — usually pays for itself within one release cycle.

B3

8–16 WEEKS

GIS ↔ Asset Management Integration Support

Integration between ArcGIS and asset-management platforms such as Maximo — asset sync, work-order flow, spatial context for CMMS users. We design and support the integration layer; partners handle deep platform customization where needed.

BEST FOR: For utilities bridging GIS and CMMS without committing to a full SI engagement.

Advisory & Enablement.

Engagements designed so your team builds capability — not dependency — with structured training and senior GIS leadership on the terms you need.

C1

2–6 WEEKS PER COHORT

GIS Training for Organizations

Remote and hybrid training programs for GIS analysts, engineering teams, and field supervisors. Curriculum covers infrastructure mapping standards, ArcGIS workflows, automation fundamentals, QA practices, and the governance habits that determine whether training sticks.

WHAT'S INCLUDED

- → Delivered in Spanish or English
- → Role-based tracks — analyst, field, engineering
- → Post-program assessment and reinforcement plan

C2

MONTHLY, 10–20 HRS

GIS Advisory Retainer

Senior GIS leadership on a fractional basis — strategy, vendor and platform oversight, hiring support, architecture review, escalation for thorny problems. Delivered as a retained engagement while you build the internal role.

WHAT'S INCLUDED

- → Monthly strategy working session
- → On-call review of decisions and vendor output
- → Quarterly roadmap and governance update

§ 07 / ENGAGEMENT MATRIX

Seven offerings, one view.

A single reference for scoping conversations — duration, best fit, and how each offering relates to the others.

ID	OFFERING	TYPICAL DURATION	BEST STARTING POINT WHEN…
A1	**GIS Data Audit & Quality Assessment**	3–5 weeks	you suspect data problems but can't yet quantify them
A2	**Infrastructure Records Digitization**	8–16 weeks	paper archives still hold authoritative asset data
A3	**CAD / Legacy → ArcGIS Migration**	6–14 weeks	you need data consolidated in modern geodatabases
B1	**GIS Asset Database Design**	6–12 weeks	you're building or rationalizing a schema from scratch
B2	**GIS Automation & Scripting**	Scoped or retained	routine GIS work is producing errors or eating analyst time
B3	**GIS ↔ Asset Management Integration**	8–16 weeks	GIS and CMMS need to share the same spatial reality
C1	**GIS Training for Organizations**	2–6 wks / cohort	you're growing internal capability alongside the platform
C2	**GIS Advisory Retainer**	Monthly, ongoing	you need senior GIS leadership without a full-time hire

Pricing is scoped per engagement and discussed on a discovery call. Offerings are often combined.

Five phases. Documented, auditable, transferable.

Every engagement follows the same arc — shaped to your scope, never improvised.

01	**Discovery & Assessment** 2–4 WEEKS	Current-state assessment, stakeholder interviews, gap analysis, prioritized findings.
02	**Roadmap & Scope** 2–3 WEEKS	Sequenced modernization roadmap, budget and resource model, governance plan, success criteria.
03	**Pilot & Validation** 8–16 WEEKS	Bounded deployment on a slice of territory. Validate workflows before scale. Adjust what breaks.
04	**Implementation & Rollout** 6–18 MONTHS	Staged rollout across crews and systems. Governance, QA, and training built in at every step.
05	**Knowledge Transfer** ONGOING	Documentation, runbooks, and certification so your team owns the platform — not us.

§ 09 / REPRESENTATIVE EXPERIENCE

25 years of work. Described honestly.

Rainbow ACS Inc. is a new firm; the principal behind it has spent 25 years inside Canadian utility and natural-resources organizations. Past work is described by shape and outcome — client names held under NDA.

FEDERAL NATURAL-RESOURCES AGENCY

National infrastructure records consolidation

Decades of paper and CAD records migrated into a structured geodatabase supporting federal asset reporting. Schema design, QA automation, and internal-staff training.

OUTCOME

Authoritative single-source records; internal team operating the platform independently within 12 months.

CANADIAN GAS TRANSMISSION OPERATOR

GIS modernization for pipeline operations

ArcGIS-based records modernization, topology repair at network scale, and integration pathways to asset-management systems. Python automation for recurring QA and reporting.

OUTCOME

Measurable reduction in manual analyst hours; cleaner data feeding downstream regulatory reporting.

ALBERTA GAS UTILITIES

Field records and asset documentation

Multi-year work converting legacy records, redlining field changes, and structuring asset data to support locate, maintenance, and damage-prevention workflows.

OUTCOME

Records that survived audits; field crews working from maps supervisors could actually defend.

What we do ourselves. What we bring partners for.

Overclaiming is the fastest way to damage a utility engagement. We are transparent about which work sits inside the firm and which requires specialist partners assembled for a named engagement.

IN-HOUSE

Direct delivery by the principal.

- → GIS data audits and quality assessments
- → Infrastructure records digitization
- → Data migration from CAD, legacy GIS, spreadsheets
- → GIS asset database and schema design
- → Python / ArcPy automation and geoprocessing tools
- → GIS ↔ asset management integration design
- → Remote and hybrid GIS training programs
- → Fractional GIS leadership and advisory

WITH NAMED PARTNERS

Assembled per engagement, disclosed to client.

- → Full-stack Utility Network implementations at scale
- → Deep Maximo or SAP PM customization and development
- → Large-scale field digitization and survey operations
- → Specialist pipeline integrity and inline inspection work
- → Change-management consulting for large workforces
- → Managed hosting and ArcGIS Enterprise administration

What we don't compromise on.

I Honest assessment.

We tell you what's actually broken, even when it's uncomfortable. The fastest path to a good engagement is a truthful diagnosis of the current state.

II Documentation over heroics.

If a project depends on a single consultant's memory, it will fail. Every decision, configuration, and workflow is documented so your team owns the outcome.

III Governance before technology.

Most failed GIS programs are governance failures disguised as technology problems. Ownership, review, and escalation structures get designed first.

IV Exit-ready from day one.

We design every engagement so your team can take over. No hidden dependencies, no proprietary traps, no indispensable consultants.

Three ways to start.

Each step is independently useful — no commitment to the next until it's earned.

01

DISCOVERY CALL

30 minutes · no charge

A focused conversation about your situation.

We listen to what you're working on, surface the questions worth answering, and suggest whether a scoped engagement makes sense.

The default first step.

02

BOUNDED ASSESSMENT

3–5 weeks · fixed scope

A small engagement that creates clarity.

Typically a GIS Data Audit (A1) or a schema readiness review. Produces a findings report and a prioritized plan.

Low-commitment entry point.

03

SCOPED PROPOSAL

Tailored to your scope

A full engagement proposal.

Once scope is understood — through a call or an assessment — we prepare a detailed proposal with deliverables, timeline, team, and pricing.

The path to a signed SOW.

START HERE **hello@sigempresa.com** · sigempresa.com · MEXICO CITY · CDMX

Disciplined work, honestly scoped.

Thank you for reading. We look forward to the conversation.

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LOCATION
Ciudad de México, CDMX

RESPONSE
Within one business day

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