# Service Offering: Independent Fiber Network Design Review

We provide independent third-party reviews of fiber optic network designs for DOTs, toll agencies, and infrastructure operators. Acting as a trusted, unbiased advisor, we ensure that fiber networks are designed and validated to the highest standards—reducing risk, improving resiliency, and delivering long-term value.

## Design & Engineering Support

* Third-Party Design Review – Validate fiber network plans for compliance, constructability, and lifecycle performance.
* Value Engineering – Recommend routing, splice, and equipment alternatives for cost savings and system efficiency.
* Standards Compliance – Confirm adherence to DOT, NESC, IEEE, and agency-specific guidelines.
* Technology Evaluation – Assess emerging fiber and optical solutions for integration with ITS, TBOS, and AMS platforms.

## Construction Oversight & QA/QC

* As-Built Verification – Confirm strand continuity, splice locations, and GPS accuracy against design.
* Quality Control Audits – Independent assessment of workmanship, material selection, and installation practices.
* Permitting & ROW Coordination – Review compliance with DOT and municipal requirements to avoid project delays.
* Testing & Certification – Provide OTDR, insertion loss, and performance validation to certify readiness.

## Project Management & Advisory

* Schedule & Cost Control – Independent review of project schedules, budgets, and contractor risk plans.
* Change Order Review – Verify necessity and fairness of contractor modifications before approval.
* Stakeholder Coordination – Serve as a bridge between DOTs, toll agencies, utilities, and contractors.
* Contractor Performance Review – Deliver objective assessments of contractor execution and compliance.

## Operations & Lifecycle Services

* Maintenance Strategy Development – Define inspection cycles, testing protocols, and redundancy planning.
* Outage Investigation – Conduct root-cause analysis of fiber failures and service interruptions.
* Resiliency Planning – Recommend failover paths, ring topologies, and spare capacity strategies.
* Training & Knowledge Transfer – Provide DOT/tollway staff with fiber network O&M training.