



## ENGINEERING PARTNERSHIPS IN INFORMATION TECHNOLOGY

**“Enhancing economic development through infrastructure”**

**Why you should choose**

**SPECTRUM for FTTX**

### • **Data Center Design / Video Headend Design**

Spectrum has had extensive experience in **Data Center Design**. The first phase typically provides a detailed conceptual/schematic design including drawings that can be used as funding acquisition and sales tools, a detailed cost estimate, proposed business case, and preliminary cash flows model. The second phase completes the detailed Mechanical, Electrical, Plumbing, and Security construction documents needed for construction.

An appropriately sized Data Center will be equipped with the following:

- Properly sized HVAC having humidity control
- State of the art fire protection and power conditioning
- Properly sized standby generation
- Transient voltage surge suppression system
- Test bench
- Electric, lighting, telecommunications, floor, trim, and door schedules
- Rack layout master plan
- Keyless entry and integrated security
- Network materials storage space

In addition to design, we can provide assistance with bidding and selection of the construction contractor and construction inspection.

**Designing a Video Headend** can include an air tower, dish farm, control building, and a video head end. Points that will be addressed include the following:

- Below grade construction (soil analysis/foundation)
- Pre-fab headend facility (floor layout)
- Outside head end infrastructure (dish farm/tower)
- Inside head end infrastructure (equipment racks)
- Passive and active electronics
- Test equipment

To complete your project, we can develop a project schedule and cost budget, publish construction documents, assist you with bidding, and assist with award of the construction contract. We can also negotiate video content, assist with acquiring cooperative purchasing memberships, and construction management.

Your Data Center may house your voice, video and data Headworks (as well as provide for future business collocation opportunities) in the same building.

Spectrum Engineering Corporation  
5524 North County Line Road  
Auburn, IN 46706

Contact Mike Wannemacher  
Phone: 260-627-8888  
[dmwannemacher@spectrumeng.com](mailto:dmwannemacher@spectrumeng.com)

We're on the Web! [www.Spectrumeng.com](http://www.Spectrumeng.com)