Mastering the art of Pathways and Spaces
The Pathway To Technology Infrastructure Project Success

Willard Straight Hall Student Union, Cornell University, Ithaca, NY

Save Time And Money On Your Capital Technology Project

As much as we live in the wireless age, a tremendous amount of various cable and fiber is still required for facility-based technology infrastructure system projects such as Communications, Security, AV and Clinical systems.

The ability to work collaboratively and creatively with project team members representing diverse interests—architecture, owner, IT, engineering, construction—is paramount to success when designing the pathways and spaces for these technology systems and connecting infrastructure.

Whether new build or retrofit, Archi-Technology has almost 20 years of experience in project planning and design that yield cost savings for our clients by eliminating unpleasant surprises during construction. It's far more cost effective to design efficient spaces and pathways *before* ground is broken, rather than during the building phase.

In addition to meeting today's technology needs (and planning for those twenty years from now), we are also acutely sensitive to the architectural aesthetic of a project. The key is continual coordination of other systems that are or may be affected by technology systems' pathways and spaces.

Boardroom, Unity Health Systems, Rochester, NY

TECHNOLOGY EXPERTISE

Technology Infrastructure
- Pathways and Spaces
- Structured Cabling

Communication Systems
- Voice Systems
- Data Systems

Audio-Video (AV) Systems
- Integrated AV
- Public Address (PA)
- Master Clock

Building Systems
- Alarm
- Building Automation

Security Systems
- Video Surveillance
- Access Control including Door Hardware *(Division 8)*

Clinical Systems
- Nurse Call
- Patient Monitoring

M E P T

Technology Consultants for the 4th Utility

Creative Spaces and Pathways Start With Building Intimacy

If you don't know what you have, it's difficult to know what you need with any degree of cost efficiency. Whether new build or retrofit, Archi-Technology starts every project with an intensive familiarization process, which includes:

- Review of historic CAD files and project data including Outside Plant.
- Physical site survey, including measurement and mapping, and updates to current drawings as required.
- Thorough building investigation to creatively maximize/re-purpose available space.

See the back of this sheet for more information including sample projects or call **585-424-1952** to discuss your specific needs.

Archi-Technology
Technology Consultants LLC

Connecting people, technology and buildings.

Creative Pathways Save More Time And Expense

Archi-Technology is especially adept at creatively designing spaces and pathways for system data-transport components that leverage available structural assets, while minimally intruding on a facility's aesthetic design, both inside and out. Here are a few projects where we helped maximize available resources to work in and around architectural features by early project participation.

Syracuse University Network Master Plan, Syracuse, NY
5+ year capital project to update communications infrastructure and systems on 30+ building campus, including comprehensive fiber-optic LAN design and construction management services for entire campus.

- Ensured systems remained operational during upgrade installations with continual coordination among campus departments.
- Maintained architectural integrity while meeting all code and design criteria, by designing pathways in unobtrusive locations.

Cancer Center, University of Rochester, Rochester, NY
This multi-phase, new construction, eight-story Cancer Center facility began in 2006 and was completed in 2012. Archi-Technology responsibilities included coordinating:

- Design and construction management of exterior conduits, entrance facilities and inter-building cable plant from the Medical Center to the new building's Communication Equipment Rooms (CERs).
- Design and construction management of intra-building cabling and CERs as well as technology systems including voice, data, overhead paging, access control, CCTV, nurse call, patient monitoring, and conference room AV equipment.
- Detailed Patient Room (at left) head wall systems pathway requirements with design/construction teams, other utilities and clinical staff needs.

## Integrating Technology with Architecture

Johnson Art Museum (JAM) and Millstein Hall, Cornell University, Ithaca, NY
While the technology systems that Archi-Technology developed for these two buildings on a stunning Ivy League campus had different retrofit versus new build challenges, they shared a need to respect the highest architectural design aesthetic while providing state-of-the-art technological capabilities. Both buildings shared the following approaches:

- The buildings themselves are inspirational works of art. This applies not just to their exteriors, but to every floor, wall, window, door and ceiling which are all, in essence, "art."
- Technology was needed but it had to be unobtrusive.
- All information-based infrastructure was designed to allow for future upgrades.
- Behind the scenes, the telecommunications rooms look like all other rooms while the technology infrastructure components are the same as other buildings. It is "business as usual" for CIT techs.
- Wireless is important in both locations. The JAM has a smartphone app; Millstein studio space users require wireless network connections to their laptops.
- The presence of valuable artworks increases the need for video surveillance, the components for which need to be unobtrusive.

Millstein Hall, School of Architecture, Cornell University, Ithaca, NY

But they were also different. Millstein Hall was new construction—pathways were poured into concrete, built into walls, and coordinated with energy-delivery infrastructure. Ceiling devices are in the open but visually blend in using a virtual ceiling concept (i.e., their mounting height is equal to other ceiling devices). Communications outlets are in floor boxes or are colored to match wall surfaces. Door security devices and pathways are integrated into frames to maintain aesthetic design.

Johnson Art was a retrofit project; pathways are hidden behind existing building infrastructure where possible or new architectural elements were added to hide the information-transporting infrastructure. Archi-Technology worked with numerous Cornell staff and vendors to plan, design and develop technology infrastructure systems that integrate digital capabilities with building architecture.
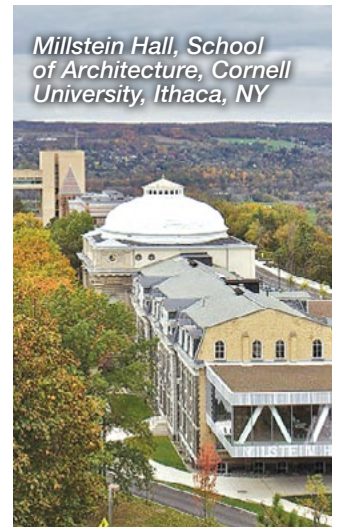
For More Information

Please visit Archi-Technology.com for more information or call **585-424-1952** to discuss your specific project requirements.

Archi-Technology
Technology Consultants LLC

Connecting people, technology and buildings.   **Main Office** 1160-J Pittsford-Victor Rd., Pittsford, NY 14534   585-424-1952   archi-technology.com