



AM Fire & Electronic Services, Inc.
Low Voltage Electrical Commercial Contracting
Alarms, Communications, Audio/Visual
Design/Build, Install, Inspect, Service, Monitor
System Reliability, On Schedule, In Budget Since 1997

Understanding and Controlling Costs for Multi-Building Fire Alarm Systems

By Daniel L. Miller, SET

The initial decisions made regarding a multiple building fire alarm system will greatly impact the both the construction costs as well as the total cost of ownership. Without question, the single aspect that has the greatest impact on both costs is whether or not to connect the buildings (via underground conduits) or to leave each building as an independent system. This paper will review each of these options, provide the tools for a cost/benefit analysis, and allow the reader to make an informed decision regarding their project's fire alarm system.

Initially, consider the simpler solution of independent buildings. Under this model, each building has a self-contained fire alarm system that does not connect in any way to any other building of the project. This eliminates the costly requirement for trenching and underground conduit. Additionally, should it be desirable to sell the buildings independently, no encumbering collaborative agreements are required. Each building's fire alarm system may be serviced by a vendor of that property manager's choice – without consulting the other buildings. Another potential savings is one of scheduling – during initial construction, buildings may be completed, rented and/or sold, and occupied without regard to the other buildings.

With all these advantages, why would independent buildings not be first choice for all projects? Long-term maintenance costs – particularly monitoring.

AM Fire & Electronic Services, Inc.
4655 Quality Court, Suite E, Las Vegas, NV, 89103
Phone: (702) 312-5276 Fax: (702) 312-5279 e-mail: info@amfes.com www.amfes.com
Nevada Contractor License #47779



AM Fire & Electronic Services, Inc. **Low Voltage Electrical Commercial Contracting**

**Alarms, Communications, Audio/Visual
Design/Build, Install, Inspect, Service, Monitor
System Reliability, On Schedule, In Budget Since 1997**

All sprinklered buildings in Nevada require remote station monitoring. Given the current state of technology, this monitoring is accomplished via either fire alarm radios or “digital communicators” (using telephone lines). Each monitoring panel (radio or digital communicator) requires an independent monitoring agreement, with an associated fee. For sake of illustration, assume a monthly cost of \$90 per monitoring panel. Now consider the costs for some typical projects.

Example A: six apartment buildings with a central office/clubhouse. Total of seven buildings, with seven monitoring panels, at \$90 per panel per month has an annual monitoring cost of \$7,560.00.

Example B: same project – but with all the apartment buildings connected via underground conduits to the central clubhouse. An intelligent fire alarm system is installed to control the entire property and individually identify any problems. A single monitoring panel is required. Total annual monitoring cost is \$1080.00.

Unless extraordinary conditions exist, most projects in excess of six buildings (and even smaller) will experience a significant savings over the life of the project by interconnecting the buildings. So determining which option is best depends on the goals of decision maker.

A developer who intends to retain ownership of the project, and is interested in controlling long-term costs, should typically select an interconnected system.

A developer who intends to sell the buildings, will need to determine how much of an obstacle an encumbering multi-building agreement would present to those future sales.

A developer to whom long-term costs are irrelevant, and is only concerned with the lowest construction costs, will choose the independent systems.

AM Fire & Electronic Services, Inc.
4655 Quality Court, Suite E, Las Vegas, NV, 89103
Phone: (702) 312-5276 Fax: (702) 312-5279 e-mail: info@amfes.com www.amfes.com
Nevada Contractor License #47779