

**THE
FIFTH ANNUAL
SOUTHERN SURETY AND FIDELITY
CLAIMS CONFERENCE**

**SURETY
CASE STUDY**

**CORRECTIONAL FACILITIES
ELECTRICAL REPROCUREMENT**

PROJECTING COMPLETION COST

"WHAT YOU SEE IS NOT WHAT YOU GET"

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1 INTRODUCTION

The correctional facility of the nineties as compared to the prison of the past is like night is to day. "There is no comparison." These new correctional facilities are designed and engineered as a stand alone complex, built on several acres of land and encompass many integrated buildings on the site.

They utilize state of the art equipment and systems for a dual electrical power system, computer and communication systems, multiplex fire alarm, cell locking and security systems, closed circuit television systems, and total lightning protection systems.

There is a central plant services building to supply heating and air conditioning to all the buildings along with a large, automatic start-up, emergency diesel generator to supply critical loads in the event of a total power failure.

In the event of a claim by the Obligee, the Surety consultant needs to review the following items described below. These items, however, present a unique challenge to the Surety because of the expense associated in dealing with these items from the outset. A delay in dealing with them will more than likely place these items on the critical path. The Surety can expect that various claims from other subcontractors and the Obligee will ensue. The delay in addressing them may also cause additional time and expense in curing these problems at a later date.

2 DESCRIPTION OF SYSTEMS

2.1 Electrical Power Service

The electrical power system for these correctional facilities are designed to provide continuous power to the facility. The incoming hi-voltage service to the on-site substation consists of dual feeders from two sources of power.

The substation includes dual, full rated, step down transformers, dual switchgear and an automatic tie circuit breaker that closes on loss of power on any one of the hi-voltage feeders.

2.2 Power Distribution System

The power distribution system throughout the facility to the step down transformers at each building is provided by an underground parallel loop feeder system. This power system is coordinated with each building's main circuit breaker to prevent nuisance tripping on up line circuit breakers.

2.3 Computer and Communication Systems

The computer systems consist of administrative main frame, networking systems and stand alone personal computers. The communication systems include public address systems, intercom systems, mobile radio systems, telephone systems, closed circuit television systems, and television signal systems.

2.4 Life Safety Systems

The life safety systems consist of emergency power generators, emergency lighting and power systems with automatic generator start up and transfer switching, and Class "A" fire alarm and smoke detection systems.

2.5 Security Systems

The security systems consist of metal detectors, duress systems, complex locking systems and full graphic control panels.

3 PROJECTING COMPLETION COST

A recent electrical default on a new correctional facility is a good illustration of this paper. "What you see is not what you get."

- 3.1 The "Principal", a fairly large electrical contractor with experience in electrical installations in correctional facilities, was awarded a contract to furnish all materials and perform all work as described in the bid documents and drawings; to complete the electrical installation in accord with the Specifications Division 16; and to provide and install a complete empty conduit system in accord with the Specifications Division 17 for the cell locking systems (provided and installed by others) for a large multi-building correctional facility.
- 3.2 The award of the electrical contract to the "Principal" was in August 1990 and the contract value was \$2,200,000±. The actual start date was November 1990 with completion in November 1992, a 24 month schedule.
- 3.3 During the early months of the schedule the "Obligee" was awarded in excess of 260 days extension to the schedule, which was not made known nor passed down to the "Principal". The electrical installation would be severely impacted by the 260 day extension, since 120 days of that 260 days was related to the central plant building which supplied heat and chilled water to all the buildings for air conditioning.
- 3.4 During January 1993, "Principal" contacted his "Surety" to tell them he was having difficulty paying his suppliers and in completing the remaining work. At this point in time "Principal" had been paid \$2,000,000± of the contract value. The pay application stated 94% complete and the documents showed a \$600,000 loss on his labor costs. The "Obligee" was not aware of "Principal's" problem and there were no signs of any default proceedings.

With no default of this "Principal" by the "Obligee" the "Surety's" options were somewhat limited.

- 3.5 The "Surety" engaged a well known Forensic Consulting company to make a two day visit to the "Principal's" office to go over the project, visit the job site with the "Principal" and his field superintendent, and to provide information to the "Surety" as to the scope of the remaining work, the financial status and the estimated projected completion cost.
- 3.6 During the job site visit each building was walked through and photographed for the record. The visible installation appeared to be in various stages of completion, however, as the title of this paper implies: "What you see is not what you get". There were wrong type conduits installed, incomplete conduit systems above ceilings and within walls, along with co-mingling of normal and emergency circuits, which would later become order of condemnation notices or Latent Defects by "Principal".
- 3.7 The "Surety" was informed by "Consultant" that it would require two to three weeks of site investigation to find and document the hidden defects and to project an accurate completion cost. This approach was not accepted by the "Surety" and an estimated completion cost of \$600,000 ± was projected based on the information obtained on the preliminary visit to the site.
- 3.8 During April 1993, "Principal" walked off the job site and was defaulted by "Obligee". The "Consultant" was then requested by the "Surety" to prepare a "Request for Quotation" to relet the remaining electrical work as a Guaranteed Maximum price based on the preliminary field visit.

3.9 The lowest bidder was a \$500,000 guaranteed maximum price, but did not include Latent Defects. The relet contractor completed his work for substantially less than the Guaranteed Maximum price. However, there were \$150,000 in hidden latent defects that could have been identified with some additional field investigation time, and would have been included in the Guaranteed Maximum price.

4 TIME OUT

Now it is your turn. What would you have done as "Surety" based on the above project history?

With these complex systems and the multiple parties investigating and inspecting these projects, you can be sure that "What you see is not what you get". Pay now or pay more later.