

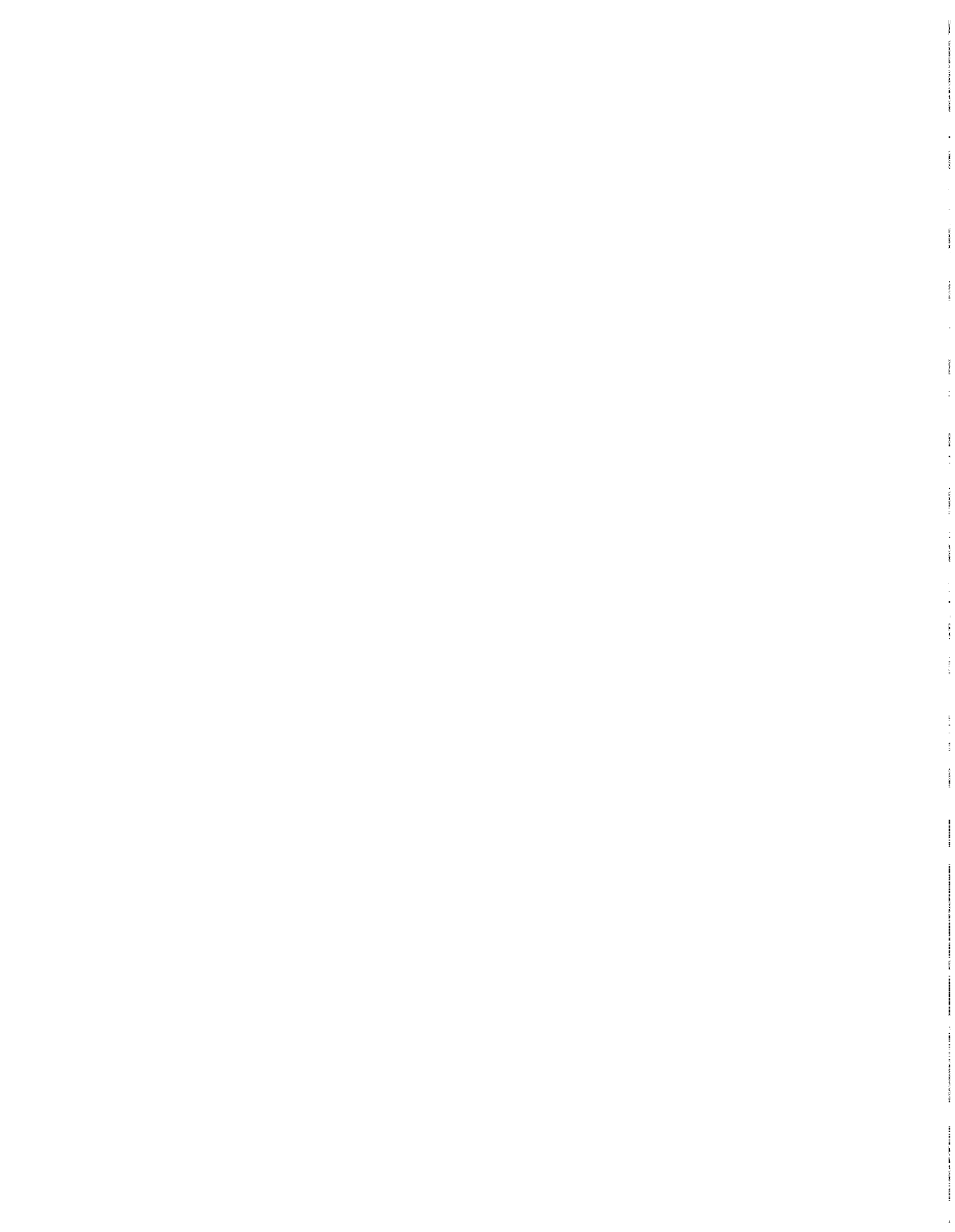
**GAO**

Report to the Chairman, Permanent  
Subcommittee on Investigations,  
Committee on Governmental Affairs,  
U.S. Senate

## **FEDERAL JAILS**

**Design and  
Construction Flaws in  
Los Angeles Facility  
Are Being Corrected**







General Government Division

B-245351

September 20, 1991

The Honorable Sam Nunn  
Chairman, Permanent Subcommittee  
on Investigations  
Committee on Governmental Affairs  
United States Senate

Dear Mr. Chairman:

This report, one of a series of reports responding to your October 3, 1988, request, describes design and construction deficiencies at the Federal Bureau of Prisons' (BOP) Metropolitan Detention Center in Los Angeles (MDC/LA) and actions taken to correct them. Specifically, this report addresses allegations that the facility's design makes it vulnerable to escape, inappropriate material was used in the housing areas, electrical wiring was inadequately protected against tampering by inmates, and the medical facilities were inappropriate for the type of health care provided at the facility.

## Background

A metropolitan detention center is a multilevel, high-rise facility designed primarily to house pretrial and presentence federal inmates. MDCs are also used to house sentenced inmates on a short-term basis, individuals committed for study and observation, and inmates who require protection. In addition to housing, MDCs generally provide most of the services available to inmates in other types of BOP institutions. Examples of such services are education, food, health, personal,<sup>1</sup> and recreation services. However, the operation of an MDC differs from other federal institutions in that the majority of MDC inmates are frequently transported into and out of the institution to attend court appearances.

Prior to the construction of MDC/LA, pretrial and presentence federal inmates in Los Angeles were housed mainly at the federal prison at Terminal Island, California—about 25 miles from downtown Los Angeles. BOP officials said that frequent docket changes and the distance involved in transporting inmates from Terminal Island to downtown Los Angeles were a burden on the U.S. Marshals Service, the courts, and the inmates. BOP's fiscal year 1983 appropriation included \$40 million for a new detention center in Los Angeles.

<sup>1</sup>Personal services include commissary, clothing exchange, barber shop, telephone room, and vending areas.

BOP officials said the most suitable site for MDC/LA was property owned by the General Services Administration (GSA) located near the federal courthouse in downtown Los Angeles. While both agencies had a role in the design of the facility, BOP agreed that GSA would manage the design and construction of the project to obtain GSA's permission to construct the facility on that property. Both GSA and BOP reviewed and approved the final project design for a 10-story facility with a total of 239,600 net square feet and a rated capacity of 544 inmates<sup>2</sup>.

After the design was approved, GSA solicited bids for a fixed-price construction contract and awarded the contract to the lowest of 10 bidders. Although BOP usually handles its own design and construction contracts, it was not involved in issuing MDC/LA's construction contract. According to a BOP official, BOP agreed to accept GSA as the contracting agency.

Construction started on the detention center in November 1986. As the contracting agency, GSA was to furnish the contracting officer for the project. GSA officials said that because of staff limitations, it was necessary for them to hire and rely on a construction management firm to handle the day-to-day management and direct oversight of the construction contract. Near the completion of the project, GSA amended the contract and gave BOP primary responsibility for contract administration. According to BOP officials, GSA shifted responsibility to BOP, which was funding the project, so BOP could negotiate the final contract closeout issues directly with the construction contractor.

MDC/LA was dedicated in December 1988. BOP records show that total project costs amounted to \$41.2 million, which is 3 percent more than the budgeted amount. Design and construction costs totaled about \$39.7 million. According to a BOP official, BOP and GSA overhead charges accounted for the \$1.5 million difference between total project costs and design and construction costs.

---

## Results in Brief

Most of the design and construction deficiencies existed in MDC LA's segregation unit, which is located on the eighth floor of the facility.<sup>3</sup> The

---

<sup>2</sup>BOP defines rated capacity as the number of inmates for which the facility is designed, not including capacity set aside for medical and disciplinary segregation.

<sup>3</sup>A segregation unit is to be designed to house inmates who are disciplinary problems or who, for other reasons, need to be separated from the general inmate population. Unlike housing units for the general inmate population, movement in segregation units is to be sharply restricted and controlled. Segregation unit cells are to be constructed of more substantial materials than general population unit cells because the inmates housed there are often hostile and destructive.

cell walls were made of plaster over steel mesh with steel studs to reduce weight in the upper floors because of local seismic considerations. According to BOP officials, at least two segregation inmates succeeded in breaching the plaster wall of their cells and entering adjacent cells.

Another problem involved segregation unit cell doors. The specifications issued by GSA and approved by BOP called for extra heavy-duty standard steel doors. The design agent's specifications called for 12-gauge steel door frames and 14-gauge steel doors. However, according to a BOP official, drawings provided to the construction contractor by the design agent called only for standard security steel doors and did not specify a gauge or the extra heavy-duty designation. As a result, the construction contractor installed less sturdy and less costly doors that inmates were able to bend and warp. On at least 12 occasions segregation unit inmates forced open the steel cell doors and gained access to the adjacent hallways. Inmates also tampered with electrical switches and light fixtures located inside their cells, either out of mischief or to light cigarettes.

None of the inmates involved in these incidents actually escaped from the segregation unit.<sup>3</sup> While the inmates who gained access to adjacent cells and hallways did not pose an immediate threat for escape, BOP officials said they were a serious threat to staff faced with returning the inmates to secure cells. In addition, the damage to the vandalized walls, doors, locks, and electrical switches created a maintenance problem. Cells were sometimes rendered unlivable while repairs were being made.

BOP is attempting to correct these deficiencies by installing metal sheathing to cell walls and ceilings, replacing the cell doors with doors of heavier gauge steel, moving electrical switches from inside the cells to the hallways, and installing more secure ceiling light fixtures. According to BOP's estimates, the cost of these correction efforts will be about \$251,012, which includes \$47,912 in design costs, \$155,100 for materials, and \$48,000 for staff and inmate labor. BOP expects this work to be completed in November 1991.

In addition to the other deficiencies, the MDC LA health unit was not used as it was originally designed to be used. A BOP official said that BOP's health units are designed to support a full health care delivery program.

<sup>3</sup>In June 1989, five inmates escaped from the eighth floor of the facility by cutting through a wire screen above a recreation deck and lowering themselves to the street on a rope made of bed sheets. This escape was attributed to staff and inmate complicity and not to design deficiencies associated with the segregation unit.

including inpatient care. He also said that medical personnel prefer to practice medicine in a clinic environment, not in housing units, and that BOP designs its medical facilities to accommodate this preference. MDC/LA was designed to provide all basic medical services in the health unit. In practice, however, funding and local staffing patterns at MDC/LA do not support the delivery of all services in the health unit. Most routine outpatient care is provided by physician's assistants in the housing units, and inmates who need to see a physician are given a clinic appointment. Rooms designed for inpatient care are used only for emergencies, and inmates needing hospitalization are referred to hospitals in the community. According to BOP officials, this arrangement is less costly than staffing the facility to provide inpatient care.

## Objectives, Scope, and Methodology

As requested by the Subcommittee, our objectives were to evaluate allegations that MDC/LA's design makes it vulnerable to escape, inappropriate material was used in the housing areas, electrical wiring was inadequately protected against tampering by inmates, and the medical facilities were inappropriate for the type of health care provided at the facility. We reviewed project files and interviewed officials at MDC/LA and at BOP and GSA headquarters in Washington, D.C. We also interviewed staff and former staff of Welton Becket Associates, Santa Monica, California (the project design agent); Martin & Associates, Inc., Los Angeles (the structural engineer); and M.H. Golden Company, Pasadena, California (the construction management firm). We did not verify the accuracy of BOP's data.

We did our work from February 1991 to July 1991 in accordance with generally accepted government auditing standards. We discussed the information in this report with BOP and GSA officials, who agreed with the facts presented.

## Plastered Walls in Segregation Unit Cells Were Breached

The segregation unit at MDC/LA is designed to house inmates who are disciplinary problems or who, for other reasons, need to be separated from the general inmate population. The segregation unit has 39 cells. The walls of the segregation unit cells are made of plaster over steel mesh with steel studs—a design which led to maintenance and security problems. BOP officials said that since the facility opened, inmates have frequently kicked or gouged through the plaster and steel mesh and sometimes made holes into adjacent cells. Two inmates reportedly entered adjacent cells by breaking through their cell walls, but neither escaped into the hallway or from the segregation unit. However, the

damage to the vandalized walls created a maintenance problem. Cells were sometimes rendered unlivable while repairs were being made.

In designing MDC/LA, BOP officials decided to locate the segregation unit on the eighth floor. BOP officials said that the eighth floor provided a built-in security advantage because it was far above the street level. BOP officials also said that the unit's placement was influenced by priorities given to the locations of other functional units, such as delivery, visiting, administration, and food services.

BOP officials and the design agent said that reinforced plaster was used to limit the weight of the upper levels of the building because of local seismic considerations. Other materials that are usually found in MDC segregation unit cell walls, such as reinforced concrete and concrete block, were considered by the design agent but rejected. According to BOP officials and the structural engineer, the added weight and required support would have greatly increased design and construction costs. The proposal to use the plaster/mesh/steel stud combination was made by the design agent during the design development phase and, according to the design agent, was fully discussed with BOP officials, who reviewed and approved the proposal. BOP officials said that all parties involved in the facility's design—BOP, GSA, and the design agent—considered the likelihood of increased maintenance an acceptable tradeoff for the lighter material. According to BOP officials, none of the parties who made the design decisions considered the plaster/mesh/steel stud design to be a security risk.

To improve security and reduce maintenance problems, MDC/LA officials requested and received BOP headquarters approval to cover segregation unit cell walls and ceilings with 8-gauge (about 11/64-inch) steel plating. BOP officials and the design agent said that steel plating was never considered as an option when material for the cell walls was selected. A BOP official said that BOP has learned from the MDC/LA experience that when building high-rise prison facilities in seismic zones, weight will be a factor in deciding where to place the segregation unit.

## Segregation Unit Cell Doors Were Not Secure

Inmates in the segregation unit cells were able to kick and shove the cell doors until the doors warped and bent outward. According to MDC/LA staff, on at least 12 occasions inmates actually forced cell doors open. However, none of the inmates escaped from the segregation unit because the cell doors opened to a secured hallway. Although the inmates who gained access to the hallway did not pose an immediate threat for

escape, BOP officials said they were a serious threat to staff faced with returning the inmates to secure cells. These incidents also increased maintenance costs because of the need to repair the doors and locks. Both security and maintenance were considered important in the decision to replace the doors.

The specifications issued by GSA and approved by BOP called for extra heavy-duty standard steel doors. The design agent's specifications called for 12-gauge (about 7/64-inch) steel door frames and 14-gauge (about 5/64-inch) steel doors. However, according to a BOP official, drawings provided to the contractor by the design agent called only for standard security steel doors and did not specify either the gauge or the extra heavy-duty designation. As a result, the contractor installed less sturdy (higher gauge) and less costly doors that inmates were able to bend and warp until they opened. BOP officials were not certain of the thickness of the steel in the doors the contractor originally installed.

The design agent agreed that the segregation unit cell doors originally installed did not meet specifications, but he disagreed with BOP's statement that an architectural omission caused the problem. He said it was a coordination issue—correct specifications were listed in one drawing but not clearly stated in another. BOP officials said that no one realized the contractor had installed the wrong doors until the problems noted above began.

To improve security and reduce maintenance problems, MDC/LA officials decided to install new 12-gauge steel doors in all 39 cells in the segregation unit. BOP officials said that for subsequent projects BOP will test the security doors prior to installation to assure compliance with specifications.

---

## Electrical Switches Inside Segregation Unit Cells Are Vulnerable to Inmate Tampering

BOP officials said that inmates in the segregation unit frequently removed the electrical switch covers in their cells and tampered with the wiring, either out of mischief or to create a spark to light cigarettes. MDC/LA officials determined that tampering with the switches created a potential safety hazard and maintenance problems. MDC/LA officials decided to move the switches from the cells to the hallways where they will be operated by corrections officers.

New ceiling light fixtures are also being installed because inmates tampered with the original fixtures. The inmates tampered with the light fixtures for the same reasons they tampered with the wiring—out of



mischief or to light cigarettes. Although the new fixtures were designated as "tamper-proof" by the manufacturer, we noted that at least one of them had been partially dismantled by an inmate. MDC/LA officials said they are in the process of determining the best way to prevent light-fixture tampering.

The segregation unit was designed to comply with BOP's policy to provide inmates with as much control over their own environment as possible without jeopardizing security and safety. To this end, inmates are given control over when they turn the lights on or off in their cells. BOP headquarters officials stand by this policy, and the MDC/LA renovation does not signal a nationwide change to BOP's policy. However, to curb further damage, BOP headquarters permitted MDC/LA officials to include the removal of the switches from the cells as part of the segregation unit's renovation.

## Renovations Are Under Way and Will Cost About \$251,000

In May 1989, BOP began renovating all 39 segregation unit cells in an attempt to address the deficiencies discussed above. Total costs for the renovations are estimated by BOP at \$251,012, which includes \$47,912 for design, \$155,100 for materials, and \$48,000 for labor<sup>5</sup>. Labor for the renovation is being provided by the MDC/LA maintenance staff and inmates. Of the \$48,000 estimated labor costs, staff salaries will amount to \$42,000. Inmate labor will account for the remaining \$6,000. MDC/LA officials expect the renovations to be completed by November 1991 within the budgeted amount.

The scope of the renovations in the segregation unit includes

- installing 8-gauge metal sheathing on the walls and ceiling of the cells;
- replacing existing metal doors with 12-gauge metal doors;
- moving electrical switches from inside the cells to a centralized location in the hallways; and
- replacing existing light fixtures with more secure incandescent fixtures.

The initial design decisions to use the plaster/mesh/steel stud design for cell walls and to place electrical outlets inside the cells were approved by BOP. Thus, the financial responsibility to correct the deficiencies rests with BOP. With respect to the inferior cell doors, BOP officials said that they will not submit a claim to the design agent or the contractor for the costs of the upgrade. They said the matter of fault would be hard to

<sup>5</sup>These amounts do not include costs incurred to repair the cells prior to renovations

prove, and the cost and trouble of trying to collect would be more than the matter is worth.

The design agent's proposal for the above renovations included placing steel sheathing on walls in cells adjacent to stairwells on the other floors where housing units are located. This renovation was suggested to prevent general population inmates in other housing units from breaching the walls of their cells and entering unsecured areas. According to MDC/LA officials, this situation has not been a problem, and the work currently under way does not include steel sheathing for any area except the segregation unit. MDC/LA officials had no plans to renovate cells on other floors. If MDC/LA officials decide to sheath cell walls on other floors, it will be done as a separate project.

## Health Unit Has Been Underused

The MDC/LA health unit was not used as it was originally designed to be used. A BOP health planning official said that BOP's health units are designed to support a full health care delivery program, including inpatient care. He also said that medical personnel prefer to practice medicine in a clinic environment, not in housing units, and that BOP designs its medical facilities to accommodate this preference.

MDC/LA was designed to provide all basic medical services in the health unit. In practice, however, budget constraints have not permitted the number of MDC/LA medical and security staff required to provide, respectively, a full range of medical services and escort inmates to and from the health unit. As a result, local officials developed a different health care delivery program than was originally planned. Rooms designed as inpatient rooms are used only for emergencies, and inmates requiring hospitalization are treated in community facilities. Most routine outpatient care is provided by physician's assistants who hold sick call and perform routine medical screenings daily in the housing units. Inmates needing to see doctors are scheduled for clinic appointments.

The MDC/LA health services administrator said the health unit is currently being used more than it was during the first 18 months of the facility's operation. He explained that staff shortages and his predecessors' preference to deliver health care services in the housing units affected the use of the unit. The administrator also said that the unit now offers clinical services, including dental care; x-rays; routine physicals; and periodic scheduled clinics, such as ophthalmology, optometry, psychiatry, x-ray, neurology, and obstetrics/gynecology for specific health problems. He also said the inpatient rooms have been converted

---

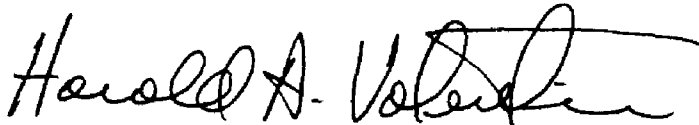
for emergency use only. MDC/LA officials believe it is less costly to send the occasional patients who need hospitalization to local facilities than to hire medical staff to provide inpatient care.

---

As agreed with the Subcommittee, unless you publicly announce the contents of this report earlier, we will not distribute it until 30 days from its issue date. At that time, we will send copies to the Attorney General; the Director, BOP; the Administrator, GSA; and other interested parties. Copies will also be made available to others upon request.

Major contributors to this report are listed in the appendix. If you or your staff have any questions, please contact me at (202) 566-0026.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Harold A. Valentine". The signature is fluid and cursive, with a long horizontal stroke at the end.

Harold A. Valentine  
Associate Director, Administration  
of Justice Issues

---

# Major Contributors to This Report

---

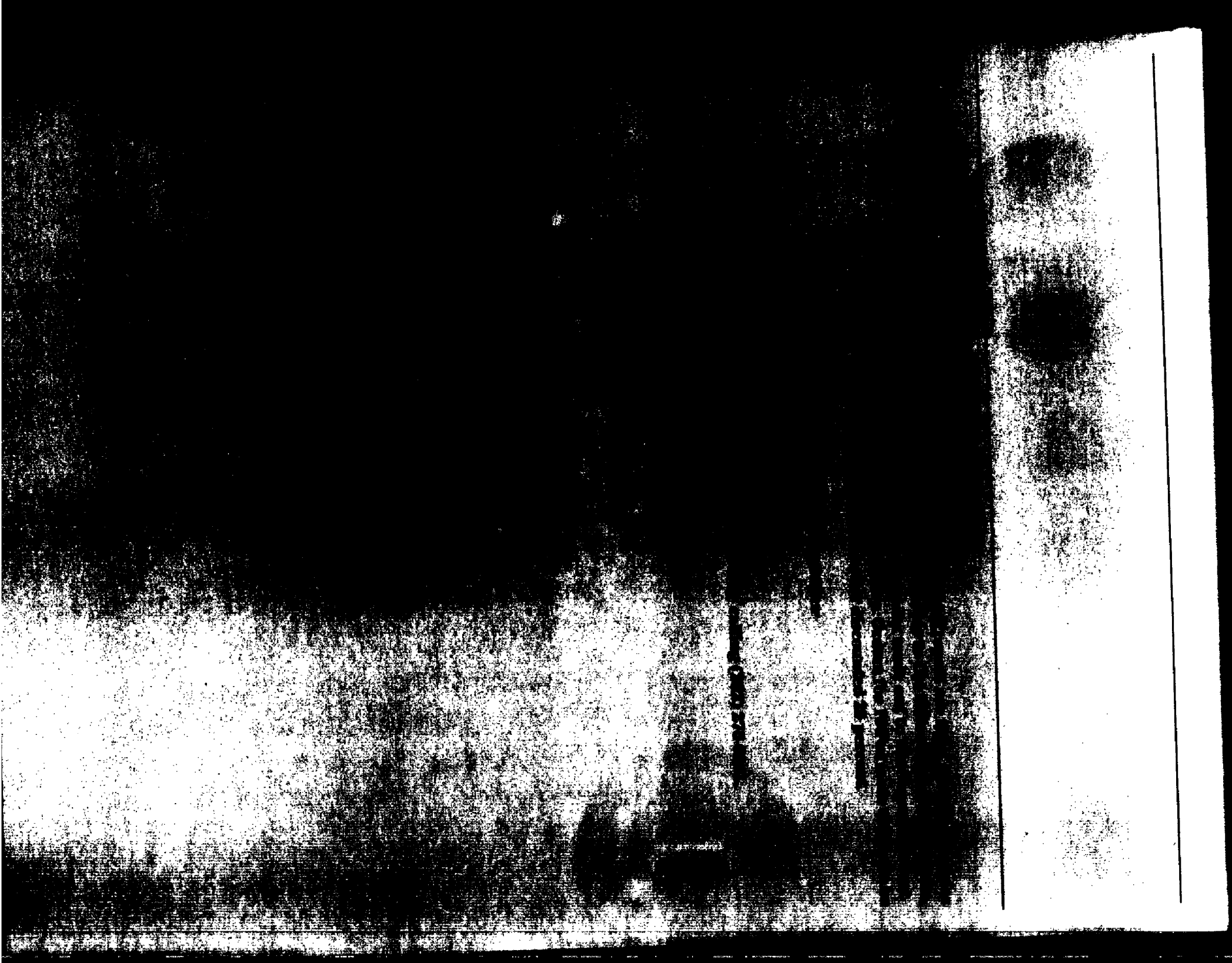
**General Government  
Division, Washington,  
D.C.**

Richard M. Stana, Assistant Director, Administration of Justice Issues  
Carl T. Trisler, Assignment Manager  
William J. Dowdal, Senior Evaluator

---

**Los Angeles Regional  
Office**

Danny M. Bullock, Regional Management Representative  
D. Stephen Kauffman, Evaluator-in-Charge



United States  
General Accounting Office  
Washington, D.C. 20548

First-Class Mail  
Postage & Fees Paid  
GAO  
Permit No. G100