



088928  
B-164031(1)  
4-3-70

**REPORT TO SUBCOMMITTEE ON  
DEPARTMENTS OF LABOR AND  
HEALTH, EDUCATION, AND  
WELFARE AND RELATED AGENCIES  
COMMITTEE ON APPROPRIATIONS  
UNITED STATES SENATE**

**RESTRICTED — Not to be released outside the General Accounting Office except on the basis of specific approval by the Office of Legislative Liaison, a record of which is kept by the Distribution Section, Publications Branch, GAO**

RELEASED

**Survey Of Progress Toward  
Constructing New Teaching Hospital  
On Howard University Campus**

B-164031(1)

**Department of Health, Education,  
and Welfare**

**BY THE COMPTROLLER GENERAL  
OF THE UNITED STATES**

**088928**

APRIL 3, 1970



COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D.C. 20548

B-164031(1)

Dear Mr. Chairman:

In accordance with a request of Mr. Harley Dirks of your staff, we are submitting to you our report on a survey of the progress being made toward the construction of a new hospital facility on the Howard University campus, authorized under legislation enacted in 1961.

The matters included in this report have been discussed with officials of Howard University; the Department of Health, Education, and Welfare; the General Services Administration; the Government of the District of Columbia; and the Bureau of the Budget, but written comments were not obtained.

As agreed with Mr. Dirks, copies of this report are being sent to the Chairmen, Senate and House Committees on Appropriations. Copies are also being sent to officials of the above agencies.

Sincerely yours,

*James P. Dirks*

Comptroller General  
of the United States

The Honorable Warren G. Magnuson  
Chairman, Subcommittee on Departments  
of Labor and Health, Education, and  
Welfare and Related Agencies  
Committee on Appropriations  
United States Senate

*DLC-06075*

*SEN 322*

## C o n t e n t s

	<u>Page</u>
DIGEST	1
CHAPTER	
1 INTRODUCTION	3
Freedmen's Hospital	4
Proposed new facilities	5
2 PLANNING FOR THE NEW FACILITIES	7
Estimated cost of construction	10
Availability of funds	11
Prospects for commencing construction	11
3 SCOPE OF SURVEY	13
APPENDIX	
I Area of hospital facilities proposed for construction at Howard University	17
II GSA estimates of costs of constructing Howard University teaching hospital	18

COMPTROLLER GENERAL'S REPORT  
TO SUBCOMMITTEE ON DEPARTMENTS OF  
LABOR AND HEALTH, EDUCATION, AND  
WELFARE AND RELATED AGENCIES  
COMMITTEE ON APPROPRIATIONS,  
UNITED STATES SENATE

SURVEY OF PROGRESS TOWARD  
CONSTRUCTING NEW TEACHING  
HOSPITAL ON HOWARD UNIVERSITY  
CAMPUS (B-164031(1))

College of Medicine

D I G E S T

WHY THE SURVEY WAS MADE

As part of its review of activities administered by the Department of Health, Education, and Welfare, the General Accounting Office (GAO) inquired as to what progress was being made toward constructing new hospital facilities at Howard University, Washington, D.C., because of indications of major changes in building design, delays in commencing construction, and substantial escalation of estimated construction costs.

FINDINGS AND CONCLUSIONS

Howard University's College of Medicine has used the clinical facilities of Freedmen's Hospital in Washington for its medical teaching program. A 1955 report by the Freedmen's Hospital Study Commission (appointed by the Secretary of Health, Education, and Welfare) stated that Howard could not provide adequate educational, research, and service programs or quality treatment of patients because the facilities of Freedmen's were outmoded and uneconomical. (See pp. 3 and 4.)

In line with the results of this study, legislation enacted in 1961 authorized the transfer of Freedmen's Hospital to Howard University and the construction of a new hospital on the Howard campus. (See p. 3.)

In late 1961 Howard commenced detailed planning for the new teaching facility. It is to consist of a seven-story building, connected to existing medical and dental facilities. It is to be situated on the site formerly occupied by Griffith Stadium. Plans provide for 632,707 gross square feet of floor space, and the new building could be expanded, horizontally. (See pp. 3 and 5.)

Construction is scheduled currently to begin in late 1970 and to be completed in early 1973. Completion of construction plans required considerably more time than had been anticipated, due principally to disagreements between Howard and the Bureau of the Budget and to time taken by participating agencies in reviewing and approving those plans. (See pp. 3 and 7.)

Estimated costs of construction have increased significantly in the 9 years since planning commenced. Because construction costs have risen an average of about 8 percent annually over the past 5 years and there has been an expansion of about 82,000 gross square feet, the estimated costs of the new teaching hospital will have increased from \$17 million in 1964 to almost \$33 million in October 1970, according to the General Services Administration. (See pp. 10 and 18.)

This increase of approximately \$16 million is derived as follows:

	<u>Millions</u>
Price inflation	\$8.5
Increase in space	4.2
Provision for potential pilferage and destruction of contractor's property	1.4
Other	1.9

Howard University has requested a supplemental appropriation for fiscal year 1970 in the amount of \$7.7 million which, if approved, would result in total appropriations (excluding the amount appropriated for purchasing and clearing the site) of about \$31.1 million for the construction of the hospital. This total is about \$2 million less than the construction cost currently estimated by GSA. (See p. 11.)

The matters included in this report have been discussed with officials of Howard University; the Department of Health, Education, and Welfare; the General Services Administration; the Government of the District of Columbia; and the Bureau of the Budget, but written comments were not obtained.

## CHAPTER 1

### INTRODUCTION

Howard University, located in the District of Columbia, was established by act of Congress, March 2, 1867 (14 Stat. 438). The University is a self-governing institution, supported jointly by congressional appropriations and private funds.

The University, consisting of 11 schools and colleges, offers programs of higher education on undergraduate, graduate, and professional levels. The University's College of Medicine has utilized the clinical facilities of Freedmen's Hospital for its medical teaching program.

Freedmen's Hospital was constructed on the Howard University campus in 1868, but until recently it was a separate institution. New hospital buildings were constructed at Freedmen's during the period 1904-1909; hospital wings were added in 1911 and 1931; and a Tuberculosis Annex with 150 beds was constructed in 1940.

The Hospital has long been considered inadequate for the teaching of clinical medicine. In line with the results of a special study completed in 1955, legislation was enacted in 1961--Public Law 87-262, approved September 21, 1961--which authorized the transfer of Freedmen's Hospital from the Federal Government to Howard University and provided for the construction of a new hospital on the Howard University campus. Under the terms of a transfer agreement entered into pursuant to the 1961 legislation, Howard University assumed control of the Hospital on July 1, 1967.

Detailed planning for the new hospital began in late 1961, and construction is scheduled to begin in late 1970. Construction of the new hospital, which will be located on the site of the old Griffith Stadium, is scheduled to be completed in early 1973.

In the years since 1961, there have been numerous changes in the design for the new hospital and in the estimated costs of construction. Following are comments

regarding the progress of the project, delays in commencing construction, and escalating costs. The scope of our survey is described on page 13.

### FREEDMEN'S HOSPITAL

Freedmen's Hospital was established by the Freedmen's Bureau of the War Department as an emergency facility for sick and destitute Negro war refugees and "freedmen" who came to Washington in the 1860's. Although other "freedmen's" hospitals established in various cities at about the same time were subsequently abandoned, the local hospital has remained in continuous operation. It serves as a teaching facility for Howard University in addition to meeting the community's need for a hospital.

Patients are admitted to Freedmen's Hospital on the basis of medical needs and the capacity of the hospital to treat them. Included are full-pay, part-pay, and indigent patients. The number of full-pay patients has declined in recent years because persons who have hospital insurance or who can afford to pay for services prefer the more modern hospitals in the metropolitan area.

In May 1961, during testimony before the Special Subcommittee on Education, Committee on Education and Labor, House of Representatives, the Secretary of Health, Education, and Welfare stated that the ability to operate Freedmen's Hospital efficiently was impaired by major deficiencies. He pointed out that (1) practically all the Hospital's 520 general hospital beds were in open wards, serving 28 to 32 patients each, (2) none of the wards had adequate toilet and bathing facilities, and (3) the nursing stations, storage areas, lounge rooms, and classrooms were likewise inadequate.

The need for a new hospital was recognized in 1955 by the Freedmen's Hospital Study Commission, which had been appointed by the Secretary of Health, Education, and Welfare to study the condition of the hospital plant. The Commission's report stated that Howard University's objectives of offering up-to-date educational, research, and service programs, as well as quality treatment of patients, could not be achieved in the obsolete, outmoded, and uneconomical facilities of Freedmen's Hospital.

## PROPOSED NEW FACILITIES

A seven-story teaching hospital is proposed to be constructed on the Howard University campus. The new structure will be bounded by Georgia Avenue and Fifth Street between U and W Streets on the site formerly occupied by Griffith Stadium. The existing medical and dental facilities, which are to be retained, will be connected with the proposed structure by a covered pedestrian bridge, spanning a staff parking area.

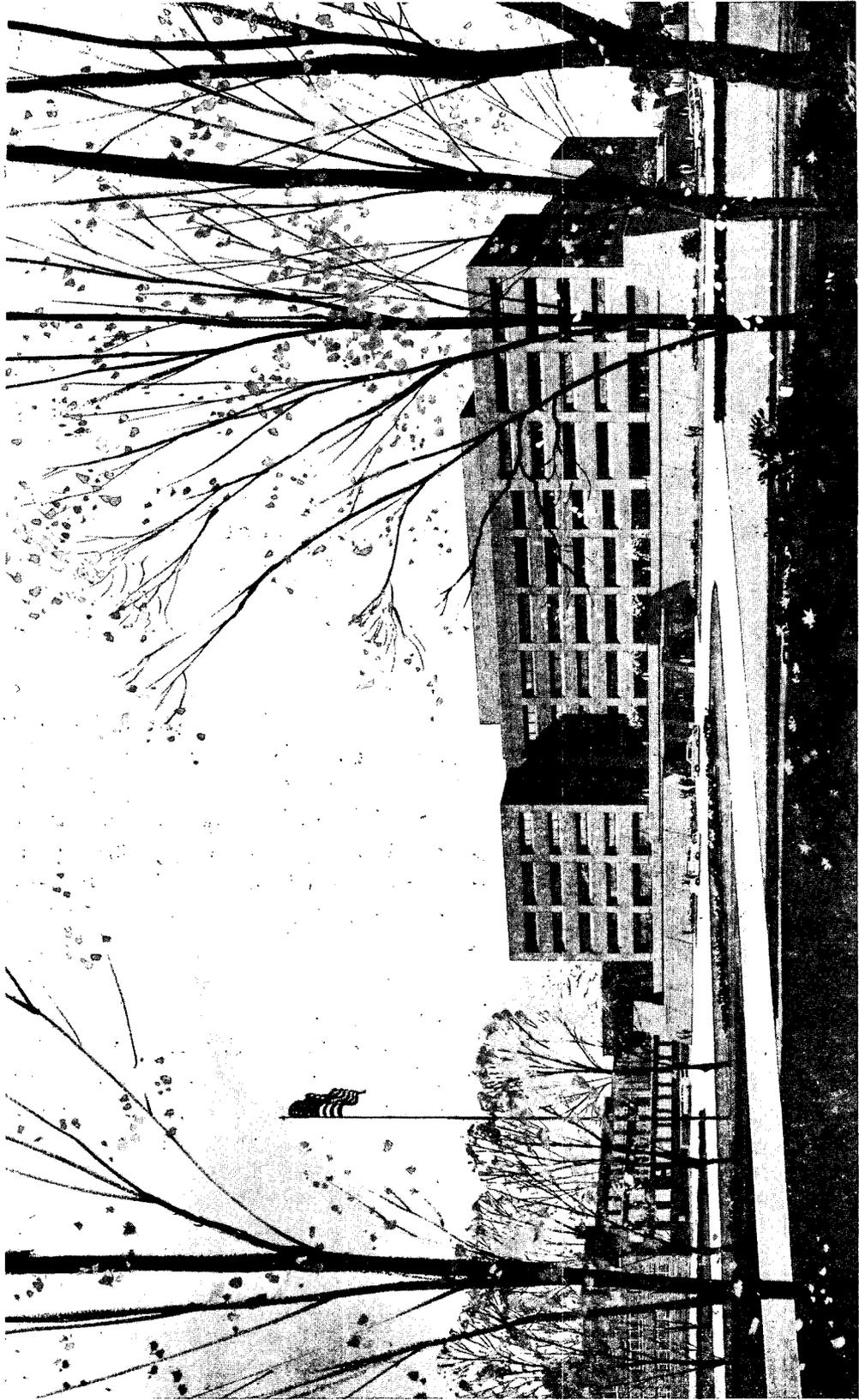
Plans for the structure provide for 632,707 gross square feet of floor space. Patients' rooms are to be distributed around the perimeter and specialty clinics and support facilities are to be in the center. Parking will be available for approximately 400 cars. There will be cafeteria facilities for 380 patrons in addition to a snack bar with a seating capacity of 50. Architectural-engineering drawings for the project are being developed by Smith, Hinchman & Grylls Associates, Inc., of Detroit, Michigan. A schedule showing distribution of space appears as appendix I.

In response to our question regarding the possibility of future expansion, Howard University officials stated that, if expansion of the hospital should be necessary, all sides except the main entrance to the building on Georgia Avenue could be extended on land already owned by the University. They stated also that the hospital would be kept sufficiently isolated from all surrounding roadways and buildings to allow for such expansion.

The Howard University officials said that, unless the architectural plans were changed, vertical expansion would not be possible because the base of the building would not be capable of supporting additional floors. Also, the District of Columbia's zoning regulations limit the height of buildings in the area to 90 feet, the presently planned height of the hospital.

An artist's drawing of the proposed Howard University teaching hospital follows.

ARTIST'S DRAWING OF  
PROPOSED TEACHING HOSPITAL



Drawing supplied by Dr. Robert Jason,  
Project Coordinator for Howard University

## CHAPTER 2

### PLANNING FOR THE NEW FACILITIES

Following enactment of Public Law 87-262, the University commenced preparation of a building program for submission to the Department of Health, Education, and Welfare (HEW) and the Bureau of the Budget (BOB), as required for obtaining Federal funds for the project. Dr. Robert Jason, Dean of Howard's medical school, was placed in charge of research and preparation of the building program. He was assisted by a hospital planning consultant, a committee of Medical School instructors, and other Howard University officials.

Completion and implementation of the program required considerably more time than had been foreseen, principally because of disagreements between the participating agencies. During the initial planning stage, BOB's Hospital Construction Unit was responsible for reviewing appropriation requests for hospital construction.

Dr. Jason told us that there had been major disagreements between the University and the BOB Hospital Construction Unit concerning the size and location of the building and the space requirements of the new hospital. He said also that the Hospital Construction Unit had concerned itself with technical details of the project and had raised so many intricate questions that the University's replies filled two volumes, each about an inch thick.

Officials of BOB advised us that such details were a part of its review designed to ascertain the need for space and to reduce costs. They further informed us that the Bureau's Hospital Construction Unit had been abolished and that, with respect to proposed future projects of this nature, the Bureau did not expect to again become involved in small technical details.

After about 20 months of deliberation (August 1962 to March 1964), compromises were reached regarding the space requirements and the estimated cost of construction; however, BOB required that feasibility studies be made

concerning (1) an appropriate location for the building site and (2) the possible uses of the Freedmen's Hospital Tuberculosis Annex which had been built in 1940. The studies were to be made by the Architect-Engineer (A-E) selected to design the hospital.

During the period March 1964 to July 1965, the University selected the A-E (Smith, Hinchman and Grylls & Associates, Inc., Detroit, Michigan) and the General Services Administration (GSA), acting as the University's agent, negotiated the contract with this firm. The required feasibility studies were completed by the A-E on October 8, 1965. The A-E recommended that the hospital be located on the Griffith Stadium site and that the Annex Building be used as a University Health Service and Nursing Education Building. BOB approved these recommendations in January 1966.

In April 1966, the A-E submitted diagrammatic sketches of the hospital to the University. These sketches omitted some of the facilities provided for in the University's program because of a gross area limitation imposed by the BOB. So that the proposed facility would be in line with facilities of other teaching hospitals, the University negotiated with BOB to increase the authorized gross area. Also, the University believed that a laundry should be provided--a proposal which had earlier been deleted from the program by BOB but was subsequently restored. However, there still remains a question as to the extent of air conditioning to be provided in the laundry facilities.

In January 1967, BOB authorized an increase in the area of the hospital from 550,550 gross square feet to 587,625 gross square feet. This increase in the scope of the project necessitated a new contract with the A-E and the preparation of new diagrammatic sketches. The new contract with the A-E was approved by HEW in June 1967, and the new diagrammatic sketches were completed in February 1968. An additional 3-1/2 months elapsed before the new diagrammatic sketches were approved by the University, GSA, the National Capital Planning Commission, and the Fine Arts Commission.

The A-E completed the tentative drawings and submitted them to GSA around the end of February 1969, and GSA

submitted these drawings to the responsible bureaus of the Government of the District of Columbia around the end of the following month. In this regard, we learned that the A-E was not advised by GSA until the end of January 1969 that the new hospital was subject to the District of Columbia building codes.

GSA received comments on the tentative drawings from the District bureaus during June 1969 and, during July and August 1969, discussed these comments with the A-E, Howard University, and District officials in an attempt to resolve problems relating to building code requirements. In March 1970 a GSA official informed us that by October 1969 the tentative drawings had been approved by all agencies concerned, except with respect to the width of the stairs of the hospital which would not meet District code requirements. He said that GSA was attempting to reach agreement with the District on this matter.

The GSA official informed us also that GSA hoped to expedite future clearances by the District of Columbia by having a team from GSA and the A-E work with the District bureaus during the development of the detailed drawings and specifications.

## ESTIMATED COST OF CONSTRUCTION

In November 1969, GSA estimated that the cost of constructing the hospital, projected for October 1970, would be as follows:

Estimated cost of construction	\$28,770,000
Contingencies (changes in plans, etc.)	1,370,000
Costs for such items as exterior lighting and sidewalks	77,000
Expenses of preparing invitations to bid and awarding contracts	137,000
Drawings and specifications (A-E)	1,512,000
Supervision (GSA)	<u>1,074,000</u>
Total	<u>\$32,940,000<sup>a</sup></u>

<sup>a</sup>Excludes \$1.725 million appropriated in 1963 for the purchase and clearing of the Griffith Stadium site.

Construction cost estimates have increased substantially during the 9 years the hospital has been in planning. According to the Boecke Index and Engineering News Record, the costs of constructing a building of this type have increased an average of 8 percent a year over the past 5 years. In 1965 the estimated hospital construction cost was \$18.5 million. Inflation and an increase of 82,163 square feet of planned space were largely responsible for the increase in the estimated construction costs. The increased space resulted from the plans for adding a laundry, more area to accommodate mechanical and air-conditioning equipment, and an extension of the bridge connecting the medical school with the hospital.

According to statistics prepared by GSA, the estimated total cost of the hospital compares favorably with the experienced costs of 12 recently completed teaching hospitals. The average cost per gross square foot for these 12 hospitals was \$54.32; the estimated cost per gross square foot for the Howard University hospital is \$52.06.

A schedule showing the escalation of costs appears as appendix II. GSA's latest cost estimate in this schedule is based on 632,707 gross square feet. This area, which exceeds by 45,000 square feet the area previously approved by BOB, is considered necessary by GSA to accommodate required mechanical equipment and circulation and storage needs.

#### AVAILABILITY OF FUNDS

As of January 31, 1970, a total of \$1,230,000 had been appropriated by the Congress for the planning of the building. Of this amount, \$260,300 remained unobligated.

The HEW appropriation bill for fiscal year 1970 included \$22.2 million for construction of the Howard University hospital. GSA had planned to issue invitations to bid on the contract for constructing the hospital in time to award a contract in October 1970. At the time of our review in February and March 1970, these plans were being held in abeyance, however, pending enactment of the HEW appropriation bill making construction funds available.

During the appropriation hearings for fiscal year 1970, a Howard University official stated that, because the budget request of \$22.2 million had been based on 1966 cost estimates, a supplementary appropriation would be requested. The University subsequently requested a supplementary appropriation for fiscal year 1970 in the amount of \$7.7 million. If Congress approves this request, the total amount appropriated for construction of the new hospital (excluding the amount appropriated for purchasing and clearing the site) will be about \$31.1 million. This total is about \$2 million less than the \$32,940,000 currently estimated by GSA as the cost of construction.

#### PROSPECTS FOR COMMENCING CONSTRUCTION

GSA is planning to award a construction contract in October 1970 with actual construction beginning shortly afterwards. GSA officials expect that, because of the current depressed state of the construction industry, a number of construction firms might be interested in bidding on the project. The Chief of GSA's Design Branch, Region 3,

informed us, however, that many contractors might be reluctant to bid because of the reports of vandalism and theft in the area of planned construction.

We understand also that contractors might have difficulty in obtaining insurance on their equipment and personnel, which would make it likely that more expensive security measures would have to be employed in the proposed work area. GSA's estimate of the construction costs was increased by about 5 percent to provide for potential pilferage and destruction of contractor's property in the event insurance is unobtainable.

## CHAPTER 3

### SCOPE OF SURVEY

Our survey of the progress being made toward the construction of the Howard University teaching hospital included a review of the applicable legislation and examination of records and/or discussions with officials of Howard University; the Department of Health, Education, and Welfare; the General Services Administration; the Government of the District of Columbia; and the Bureau of the Budget. During our visit to Howard University, we also inspected the site of the planned hospital.



**APPENDIXES**



AREA OF HOSPITAL FACILITIES PROPOSED  
FOR CONSTRUCTION AT HOWARD UNIVERSITY

<u>Floor</u>	Net area (sq. ft.) (note a)	Gross area (sq. ft.) (note b)
Basement	77,435	128,785
1	66,585	124,662
2	36,815	64,401
3	43,410	69,943
4	43,125	69,943
5	43,000	69,943
6	43,970	69,943
Penthouse	713	26,055
Upper penthouse	<u>-</u>	<u>2,604</u>
Total	355,053	626,279
Bridge (1st level)	2,855	3,214
Bridge (2d level)	<u>2,855</u>	<u>3,214</u>
Total square feet	<u>360,763</u>	<u>632,707</u>

<sup>a</sup> Net area is defined as usable space; i.e., operating rooms and offices.

<sup>b</sup> Gross area includes lobbies, corridors, etc.

Note: There will be surface parking for 400 cars and underground parking for four ambulances.

# APPENDIX II

GSA ESTIMATES OF COSTS OF CONSTRUCTING  
HOWARD UNIVERSITY TEACHING HOSPITAL  
WASHINGTON, D.C.

	<u>1964</u>	<u>1965</u>	<u>1965</u>	<u>1967</u>	<u>1969</u>	<u>Projected</u>	
						<u>1970</u>	<u>1970</u>
Date	Aug. 12	Feb. 12	June 9	Feb. 15	Aug.	Aug.	Oct.
Gross area (sq. ft.)	550,544	550,544	550,544	611,625	632,707	632,707	632,707
Net area (sq. ft.)	350,018	350,018	350,018	365,775	360,763	360,763	360,763
Percentage of net to gross area	<u>63.6%</u>	<u>63.6%</u>	<u>63.6%</u>	<u>59.8%</u>	<u>57.0%</u>	<u>57.0%</u>	<u>57.0%</u>
Estimated construction cost	\$14,996,000	\$16,340,000	\$16,340,000	\$20,325,000	\$25,000,000	\$27,000,000	\$28,770,000 <sup>a</sup>
Contingencies (note b)	750,000	817,000	817,000	1,016,000	1,256,000	1,356,480	1,370,000
Costs for such items as exterior lighting and sidewalks (note b)	84,800	93,000	93,000	150,000	70,000	75,600	77,000
Expense of preparing invitations to bid and awarding of contracts (note b)	38,000	40,000	40,500	38,000	125,000	135,000	137,000
Drawings and specifications (A-E) (note b)	721,200	791,000	926,318	932,000	1,400,000	1,512,000	1,512,000
Supervision (notes b and c)	224,000	240,000	240,000	496,000	975,000	1,053,000	1,074,000
Howard University and consultants	170,000	185,000	-	232,000	-	-	-
Staff services	16,000	-	-	-	-	-	-
Fallout shelter	-	<u>42,000</u>	-	-	-	-	-
Total project cost	<u>\$17,000,000</u>	<u>\$18,548,000</u>	<u>\$18,456,818</u>	<u>\$23,189,000</u>	<u>\$28,826,000<sup>d</sup></u>	<u>\$31,132,080<sup>e</sup></u>	<u>\$32,940,000</u>
Cost per gross sq. ft.	\$ <u>30.88</u>	\$ <u>33.69</u>	\$ <u>33.52</u>	\$ <u>37.91</u>	\$ <u>45.56</u>	\$ <u>49.20</u>	\$ <u>52.06</u>

<sup>a</sup>Includes a markup of approximately 5% over August 1970 estimated construction cost to cover potential pilferage and destruction of contractor's property.

<sup>b</sup>Figures are estimates based on a percentage of the estimated construction cost.

<sup>c</sup>Reimbursement to GSA's Construction Services, Building Fund (Revolving), for GSA supervision of construction and alteration activities.

<sup>d</sup>Includes \$4,242,000 for 82,163 sq. ft. of space added to the plans since 1964. This additional space will be used for a laundry, housing mechanical equipment, and an extension of the bridge connecting the medical school with the hospital.

<sup>e</sup>Includes \$8,500,000 for escalation in costs since 1964 (average of 8% a year).