



DATE: October 19, 2023

TO: Commissioners

FROM: Jeanne-Marie Gawel
Acting Chief, Certificate of Need

SUBJECT: In the Matter of University of Maryland Medical Center Request for
Project Change after Project Approval
Docket No. 19-24-2438

Enclosed is the staff report and recommendation for a Request for a Project Change after Project Approval submitted by University of Maryland Medical Center (UMMC), an academic medical center serving as the teaching hospital for the University of Maryland School of Medicine and is the largest hospital within the 12-hospital University of Maryland Medical System, Inc. On August 20, 2020, the Maryland Health Care Commission approved a certificate of need (CON) to construct a nine-story addition on the east side of the North Hospital building at the corner of Greene and Baltimore streets in Baltimore City. The approved project includes the addition of 62 beds to the hospital's existing physical bed capacity, approximately 155,000 square feet (SF) of new construction, and approximately 73,000 SF in renovations to contiguous existing space within the North Hospital. The project was approved at a cost of \$194,368,000, which UMMC would fund with a state grant of 95.8 million a \$78.5 million in authorized bonds, \$10 million in cash, \$20 million in philanthropic donations and \$100,000 in cash.

UMMC is requesting a project change to increase the capital costs associated with the project, and to make changes in the physical plant design. The total project cost has increased significantly to \$269,190,180, an increase of \$74,822,180 or approximately 37.3%. UMMC states that the project cost increase is due to delays that occurred due to the COVID-19 pandemic. Since the filing, there has been a significant escalation in project costs and several necessary renovation costs were not included in the original budget. Additionally, a number of design changes have been made, to improve the efficiency of the new facility.

UMMC will pay for the additional capital costs using authorized bonds (\$50,965,495), related interest income (\$3,956,685), and increasing its philanthropy goal (\$20,000,000). According to the applicant, it has raised \$35 million in charitable contributions to date and fully expects to reach its target. UMMC plans the issuance of the bonds in CY 2024 and assumes a 5% borrowing rate in its projections. The applicant stated that \$100,000 in cash that was originally slated will not be used for the project. UMMC stated that it has no plans to file a partial rate adjustment application to the HSCRC to offset the cost increases.



Staff recommends that the Commission **APPROVE** the request for a project change after issuance of a Certificate of Need. Staff recommends the following conditions be incorporated in the request by University of Maryland Medical Center for changes to its August 20, 2020 Certificate of Need for the construction of a Cancer Center Tower:

1. Prior to its request for first use approval, UMMC will submit an assessment of the need for surge bed capacity at UMMC and its plan to maintain and deploy adequate surge bed capacity when needed.
2. Any future change to the financing of this project involving adjustments in revenue must exclude \$10,470,000 in shell space-related costs, which includes the estimated new construction costs of the proposed shell space and portions of the contingency allowance, inflation allowance, and capitalized construction interest expenditure related to the estimated cost of the shell space.
3. UMMC will not finish the shell space on either the second or third floor without giving notice to the Commission and obtaining all required Commission approvals. UMMC will not request any adjustment in budgeted revenue by the Health Services Cost Review Commission (HSCRC) that includes depreciation or interest costs associated with construction of the proposed shell space unless UMMC has obtained either CON approval for finishing the shell space or a determination of coverage from the Maryland Health Care Commission that CON approval is not required.
4. In calculating any future adjustment to budgeted revenues related to the costs of this project, HSCRC shall exclude the capital costs associated with the shell space until the space is finished and put to use in a regulated activity. In calculating any revenue adjustment that includes an accounting for capital costs associated with the shell space, the rate shall only account for depreciation and interest expenses going forward through the remaining useful life of the space.
5. Any future change to the financing of this project involving adjustments in rates set by the Health Services Cost Review Commission must exclude \$9,120,808, which includes the estimated new construction costs that exceed the Marshall Valuation Service guideline cost and portions of the contingency allowance and inflation allowance that are based on the excess construction cost.

IN THE MATTER OF	*	BEFORE THE
	*	
UNIVERSITY OF MARYLAND	*	MARYLAND HEALTH
	*	
MEDICAL CENTER	*	CARE COMMISSION
	*	
CANCER CENTER	*	
	*	
DOCKET NO. 19-24-2438	*	

**STAFF REPORT
REQUEST FOR PROJECT CHANGE
AFTER CERTIFICATE OF NEED APPROVAL**

I. INTRODUCTION

Background

The University of Maryland Medical Center (UMMC), located at 22 South Greene Street in Baltimore City, is an academic medical center serving as the teaching hospital for the University of Maryland School of Medicine and is the largest hospital within the 12-hospital University of Maryland Medical System, Inc. (UMMS). UMMC is the second largest hospital in the State, licensed to operate 710 acute care beds in FY 2024 allocated to the following acute care services: 579 to medical/surgical/gynecological/addictions (MSGA), 30 for obstetrics, 59 for pediatrics, and 42 for acute psychiatric care.¹

The Commission awarded a certificate of need (CON) authorizing the original project on August 20, 2020, to construct a nine-story addition on the east side of the North Hospital building at the corner of Greene and Baltimore streets in Baltimore City. The approved project includes the addition of 62 beds to the hospital’s existing physical bed capacity, approximately 155,000 square feet (SF) of new construction, and approximately 73,000 SF in renovations to contiguous existing space within the North Hospital building. The Commission approved \$194,368,000 in total use of funds for the project, including \$184,493,169 in current capital expenditures and a budgeted inflation allowance of \$9,374,831, for total capital costs of \$193,868,000, and \$500,000 in financing costs and other cash requirements.

Requested Project Changes

UMMC is requesting a project change to increase the costs associated with the project to \$269,190,180 and to make changes in the physical plant design.

UMMC states that the original project budget of \$194.4 million was based on cost estimates from contractors based on market conditions at the time the application was submitted in 2019 and

¹ MHCC Acute Care Hospital Inventory FY 2024
https://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_hospital/documents/acute_care/chcf_acute_care_FY24%20Licens ed%20Beds_20230717.pdf

did not consider delays that would occur due to the COVID-19 pandemic. Since CON approval, there has been a significant escalation in project costs and several necessary renovation costs were not included in the original budget. Additionally, several design changes have been made, which will improve the efficiency of the new facility as well as improve the movement of patients, visitors, and materials. The applicant indicates that the increased project budget reflects the current cost estimates for the project. (Please see **Appendix 1** for Revised Project Budget).

UMMC states that some of the design changes include moving the apheresis and cell processing laboratory into the main hospital from the cancer center, building out space originally planned as shell space, slightly expanding the footprint of the new construction from 154,610 SF to 190,062 SF, and adding service elevators to provide adequate support for the new cancer center. The expanded footprint of the new building will reduce the total amount of renovated space by approximately 30,000 SF. Please see Table I-1 for the revised project timeline.

Table I-1 UMMC -Timetable for Completion of Project

Phase	Scope	Completion Date
1	Tower Construction	January 2026
	Renovation of Lobby	January 2026
2	Renovation of existing hospital space	December 2026

Source: May 17, 2023, Responses to request for additional information, p.1

Based on the changes in the physical plant design, UMMC is also seeking to remove a condition that was based on the approved project design. The approved project included shell space on the third and fourth floors of the new building, and the CON included a condition for future use of this shell space. The current request includes a revised floor plan with no shell space on the fourth floor, making the condition obsolete as currently written.

UMMC will pay for the additional costs using authorized bonds (\$50,965,495), related interest income (\$3,956,685), and increasing its philanthropy goal (\$20,000,000). According to the applicant, it has raised \$35 million in charitable contributions to date and fully expects to reach its target. UMMC plans the issuance of the bonds in CY 2024 and assumes a 5% borrowing rate in its projections. The applicant stated that \$100,000 in cash that was originally slated will not be used for the project.

UMMC stated that it has no plans to file a partial rate adjustment application to the HSCRC to offset the cost increases, as the project expenses do not exceed UMMC’s budget for capital projects.

II. APPLICABLE REGULATIONS

If an applicant seeks to make a permissible change from a project that has received CON approval, it requires approval from the Commission pursuant to COMAR 10.24.01.17. Any of the following changes would place a project at variance with its CON, and require Commission approval:

- (1) Before making a significant change in physical plant design;
- (2) Before incurring capital cost increases that exceed the approved capital cost inflated by an amount determined by applying the Building Cost Index published in Health Care Cost Review from the application submission date to the date of the filing of a request for approval of a project change;
- (3) When total projected operating expenses or revenue increases exceed the projected expenses or revenues in the approved Certificate of Need Application, inflated by 10 percent per year;
- (4) Before changing the financing mechanisms of the project;
- (5) Before changing the location or address of the project.²

This project requires Commission action because it seeks to make changes that would put the project at variance with its CON. The project changes result in significant changes to the physical plant design under COMAR 10.24.01.17B(1), an increase in capital costs under B(2), and changes in the financing mechanics of the project under B(4).

Under COMAR 10.24.01.17D(3), the Commission may approve the requested change, approve the change in part or approve with conditions, not approve the change with explanation, or require a complete CON review due to the scope of the requested change.

The Change in Project Cost Exceeds the Inflation Allowance

UMMC indicates that the project, as changed, would require an additional capital expenditure of \$74,822,180. CON regulations provide for an inflation allowance, calculated using the Building Cost Indices published on a quarterly basis by IHS Markit in the *Healthcare Cost Review*.³ However, project cost increases that exceed this inflation allowance are required to obtain Commission approval.

Using the building cost inflation index noted above, the calculated allowable capital costs after factoring in the inflation allowance is \$207,632,638, or an inflationary allowance of \$13,764,628 (an approximately 7.1% increase from the original CON-approved project costs). This inflationary allowance is well below the estimated capital cost increase projected by UMMC (\$7,180 or about a 37.3% increase) for the completion of the project as now configured. Additionally, financing and planning costs have increased by \$2,369,000. Thus, Paragraphs .17B (2) and .17B(4) of this chapter require Commission authorization for the proposed cost increases.

III. COST INCREASE AND FINANCIAL IMPACT OF THE REQUEST

Current Request Compared with the Original Approved Budget

With the approval of this project on August 20, 2020, the Commission issued the CON with the following four conditions:

² COMAR 10.24.01.17B

³

https://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_con/documents/2023_1st_qtr_cost_ind_cap_cost_mod_20230816.pdf

1. Prior to its request for first use approval, UMMC will submit an assessment of the need for surge bed capacity at UMMC and its plan to maintain and deploy adequate surge bed capacity when needed.
2. Any future change to the financing of this project involving adjustments in revenue must exclude \$2,210,850 in shell space-related costs, which includes the estimated new construction costs of the proposed shell space and portions of the contingency allowance, inflation allowance, and capitalized construction interest expenditure related to the estimated cost of the shell space.
3. UMMC will not finish the shell space on either the third or fourth floor without giving notice to the Commission and obtaining all required Commission approvals. UMMC will not request any adjustment in budgeted revenue by the Health Services Cost Review Commission (HSCRC) that includes depreciation or interest costs associated with construction of the proposed shell space unless UMMC has obtained either CON approval for finishing the shell space or a determination of coverage from the Maryland Health Care Commission that CON approval is not required.
4. In calculating any future adjustment to budgeted revenues related to the costs of this project, HSCRC shall exclude the capital costs associated with the shell space until the space is finished and put to use in a regulated activity. In calculating any revenue adjustment that includes an accounting for capital costs associated with the shell space, the rate shall only account for depreciation and interest expenses going forward through the remaining useful life of the space.

UMMC compared the originally approved costs of this project with its current cost estimate. UMMC stated that the increase in project costs is a result of delayed implementation due to the COVID-19 pandemic; an underestimation of project escalation costs since the original filing on February 8, 2019; several unanticipated construction requirements; and design modifications needed to increase efficiency and meet regulatory requirements.

During the COVID-19 pandemic, the hospital focused on its response to the health crisis. UMMC stated that over this time, costs for materials and labor increased beyond what was projected in its original estimates. UMMC also stated that the original estimates for pre-construction costs were based on other projects in the area, which were not accurate.

In addition to the recent changes within the construction market, UMMC referenced several changes to the original project design, stating that there were several enabling requirements that were not included in the original budget. These include: the relocation of the infusion unit (\$400,000); renovations to the South Entrance during construction (\$1 million); renovation to the upper floor of the North Hospital building for the new service elevator tie in (\$3 million); and other related renovations (\$500,000). Additionally, the original project contained two floors of shell space on floors three and four of the new tower. The amended plans include a buildout of the fourth floor, leaving shell space on floor three and a section of floor two. Construction costs for the shell space have increased from \$2,210,850 to \$10,470,000. Overall construction costs for the new building will increase by \$83,857,831, while renovations required in the existing north tower

will decrease by \$5.9 million.

MVS Analysis

Commission staff and UMMC each calculated the Marshall Valuation Service (MVS) benchmark analysis that compared the project's estimated allowable new construction costs for the 190,062 SF 14-story cancer center tower, derived using the MVS guide. Table III-1 below provides the comparison of both MVS allowable construction costs with the MVS benchmark value.

**Table III-1: MHCC and UMMC Comparison Table
Calculation of Excess Construction Cost Over MVS Benchmark Value**

	MHCC MVS Calculations	UMMC MVS Analysis
Project Cost for MVS Comparison (SF)¹	\$ 546.27	\$ 546.27
Less MVS Benchmark Cost (SF)	\$ 504.77	\$ 506.13
Over (=Project Cost - MVS Benchmark -Abnormal Shortage Multiplier)	\$ 41.50	\$ 40.15
Square Footage (Cancer Center Tower)	190.062	190.062
Construction Costs over MVS Benchmark (Total Dollar Amount)²	\$ 7,887,573	\$ 7,630,989
Percentage Construction Cost over MVS Benchmark	8.22%	7.93%
Contingency Allowance (Project budget)	\$ 15,000,000	\$ 15,000,000
Amount Contingency Allowance excluded	\$ 1,233,235	\$ 0
Total to be excluded from any rate increase proposed by the hospital	\$ 9,120,808	\$ 7,630,989

¹Includes portion capitalized construction interest expenditure

²Using Percentage Construction Cost over MVS Benchmark

The purpose of the MVS analysis is to provide a basis for excluding any excess construction costs from any future rate increase by the applicant to cover the cost of the project. See Appendix 2 for more details on the MVS analysis. In an MVS analysis, MHCC staff compares the project's estimated construction cost, adjusted for specific construction characteristics of the proposed project, with a benchmark derived using the cost-estimating methodology provided by MVS.

MHCC staff and UMMC each calculated allowable new construction cost used in comparison with the MVS benchmark values for the proposed cancer center tower. MHCC staff calculated an estimated allowable new construction cost of \$546.27 per SF and an MVS benchmark of \$504.77 per SF. Comparably, the applicant arrived at the same estimated allowable new construction cost of \$546.27 per and an MVS benchmark value that higher at \$506.13 per SF.

MHCC's analysis shows that the MVS allowable construction costs exceeded the MVS benchmark value by \$7,887,573. UMMC's analysis shows that the allowable construction costs only exceed its calculated MVS benchmark value by \$7,630,989. The difference is due to a difference in calculating the perimeter multiplier, a basic component in MVS analysis (See

Appendix 2). MHCC's analysis showed that \$9,120,808 should be excluded from any future rate increase due to construction of this hospital tower, while UMMC calculated a \$7,630,989 exclusion. This difference is mainly due to MHCC including the proportion of the contingency allowance in its calculation, while UMMC did not. COMAR 10.24.10.04B(7), Construction Cost of Hospital Space states that:

If the projected cost per square foot exceeds the Marshall Valuation Service benchmark cost, any rate increase proposed by the hospital related to the capital cost of the project shall not include the amount of the projected construction cost that exceeds the Marshall Valuation Service benchmark and those *portions of the contingency allowance, inflation allowance, and capitalized construction interest expenditure that are based on the excess construction cost.*

While UMMC's analysis includes the capitalized construction cost interest expenditure in its MVS comparison, the hospital did not include the contingency allowance in its calculations in determining the total construction costs to be excluded from any rate increase proposed by the hospital. There is no inflation allowance included in the budget for the revised project.

Staff recommends amending the second original condition to exclude the following amount from any partial rate adjustment applications submitted to HSCRC in the future:

Any future change to the financing of this project involving adjustments in rates set by the HSCRC must exclude \$9,120,808, which includes the estimated new construction costs that exceed the Marshall Valuation Service guideline cost and portions of the contingency allowance that is based on the excess construction cost.

Impact on Financial Performance

As previously discussed, the requested project change includes a capital budget increase of \$74,882,180, which will increase the authorized bonds by \$50,965,495. The remaining increase will be paid for through interest income and philanthropy. The applicant stated that it would not be seeking an increase in its Global Budget Revenue (GBR) related to this project.

MHCC requested that the Health Services Cost Review Commission (HSCRC) provide an opinion on the financial viability of the proposed project change, taking into consideration the proposed cost escalations. HSCRC staff responded on October 13 stating that they had reviewed the UMMC project change request, and all submitted supplemental submissions, including the revised expenditures, sources of funds, and profit and loss projections. HSCRC staff prepared a pro forma Profit and Loss (P & L) projection to evaluate the impact of this project change on UMMC's future financial operating performance. HSCRC indicates that the P & L statements show gross revenue projections for 2024 that show an average annual growth rate of 3.43%, which HSCRC finds to be reasonable.

In closing, HSCRC provides the following recommendation: "with prudent management, the UMMC project, as described in the Request for Post-Approval Project Change, remains initially feasible and viable on an ongoing basis, notwithstanding the 38.5% increase in the project's budget."

IV. ANALYSIS

Staff concludes that the project change request is a permissible change under COMAR 10.24.01.17B. There are no material changes to the nature of the project, its location, or the core service capacities. The requested change would not alter the findings that the Commission made in August 2020 concerning the need for and the positive long-term impact of the project.

Staff agrees with and adopts the HSCRC analysis in the Memo dated October 13, 2023, stating that the HSCRC finds that the proposed changes to the costs for the new cancer center building are financially feasible. Based on these findings, MHCC staff concludes that the new cancer center project is financially feasible.

ORDER

Based on the Commission staff's analysis of this request for a project change after issuance of a Certificate of Need, it is ordered on this 19th day of October 2023 that:

The request by The University of Maryland Medical Center for changes to its August 20, 2020, Certificate of Need for the addition of a nine-story addition to its existing north tower has increased to a total cost of \$ 269,190,180 is **APPROVED**, with the following conditions:

1. Prior to its request for first use approval, UMMC will submit an assessment of the need for surge bed capacity at UMMC and its plan to maintain and deploy adequate surge bed capacity when needed.
2. Any future change to the financing of this project involving adjustments in revenue must exclude \$10,470,000 in shell space-related costs, which includes the estimated new construction costs of the proposed shell space and portions of the contingency allowance, inflation allowance, and capitalized construction interest expenditure related to the estimated cost of the shell space.
3. UMMC will not finish the shell space on either the second or third floor without giving notice to the Commission and obtaining all required Commission approvals. UMMC will not request any adjustment in budgeted revenue by the Health Services Cost Review Commission (HSCRC) that includes depreciation or interest costs associated with construction of the proposed shell space unless UMMC has obtained either CON approval for finishing the shell space or a determination of coverage from the Maryland Health Care Commission that CON approval is not required.
4. In calculating any future adjustment to budgeted revenues related to the costs of this project, HSCRC shall exclude the capital costs associated with the shell space until the space is finished and put to use in a regulated activity. In calculating any revenue adjustment that includes an accounting for capital costs associated with the shell space, the rate shall only account for depreciation and interest expenses going forward through the remaining useful life of the space.
5. Any future change to the financing of this project involving adjustments in rates set by the Health Services Cost Review Commission must exclude \$9,120,808,

which includes the estimated new construction costs that exceed the Marshall Valuation Service guideline cost and portions of the contingency allowance and inflation allowance that are based on the excess construction cost.

APPENDIX 1

REVISED PROJECT BUDGET

	Approved CON Budget, Hospital Building1	New Proposed Budget, Hospital Building1	Variance
A. USE OF FUNDS			
1. CAPITAL COSTS			
a. New Construction			
(1) Building	\$ 84,625,169	\$ 161,178,681	\$ 76,553,512
(2) Fixed Equipment			\$ -
(3) Site and Infrastructure	\$ 13,000,000	\$ 17,454,319	\$ 4,454,319
(4) Architect/Engineering Fees	\$ 12,000,000	\$ 15,190,000	\$ 3,190,000
(5) Permits (Building, Utilities, Etc.)	\$ 1,000,000	\$ 660,000	\$ (340,000)
SUBTOTAL	\$ 110,625,169	\$ 194,483,000	\$ 83,857,831
b. Renovations			
(1) Building	\$ 20,000,000	\$ 14,100,000	\$ (5,900,000)
(2) Fixed Equipment (not included in construction)			
(3) Architect/Engineering Fees			
(4) Permits (Building, Utilities, Etc.)			
SUBTOTAL	\$ 20,000,000	\$ 14,100,000	\$ (5,900,000)
c. Other Capital Costs			
(1) Movable Equipment	\$ 30,000,000	\$ 32,706,450	\$ 2,706,450
(2) Contingency Allowance	\$ 15,000,000	\$ 15,000,000	\$ -
(3) Gross interest during construction period	\$ 8,868,000	\$ 10,031,730	\$ 1,163,730
(4) Other (Specify/add rows if needed)			
SUBTOTAL	\$ 53,868,000	\$ 57,738,180	\$ 3,870,180
TOTAL CURRENT CAPITAL COSTS	\$ 184,493,169	\$ 266,321,180	\$ 81,828,011
d. Land Purchase			
e. Inflation Allowance			
	\$ 9,374,831	\$ -	\$ (9,374,831)
TOTAL CAPITAL COSTS	\$ 193,868,000	\$ 266,321,180	\$ 72,453,180
2. Financing Cost and Other Cash Requirements			
a. Loan Placement Fees	\$ 50,000	\$ 933,450	\$ 883,450
b. Bond Discount		\$ -	
c. CON Application Assistance	\$ 100,000		\$0 ²
c1. Legal Fees		\$ 100,000	\$0 ²
c2. Other (Accounting, Architectural, Planning)		\$ 1,039,400	\$ 1,039,400
d. Non-CON Consulting Fees			
d1. Legal Fees	\$ 200,000	\$ 32,150	\$ (167,850)
d2. Other (third party peer review of documents; third party testing & scheduling, curtain wall testing)	\$ 150,000	\$ 764,000	\$ 614,000
e. Debt Service Reserve Fund	\$ -	\$ -	\$ -
f. Other (Specify/add rows if needed)			
SUBTOTAL	\$ 500,000	\$ 2,869,000	\$ 2,369,000
3. Working Capital Startup Costs			
TOTAL USES OF FUNDS	\$ 194,368,000	\$ 269,190,180	\$ 74,822,180
B. Sources of Funds			
1. Cash			
2. Philanthropy (to date and expected)			
	\$ 20,000,000	\$ 40,000,000	\$ 20,000,000
3. Authorized Bonds			
	\$ 78,500,000	\$ 100,233,495	\$ 21,733,495
4. Interest Income from bond proceeds listed in #3			
		\$ 3,956,685	\$ 3,956,685
5. Mortgage			
6. Working Capital Loans			
7. Grants or Appropriations			
a. Federal			
b. State			
	\$ 95,768,000	\$ 125,000,000	\$ 29,232,000
c. Local			
8. Other (Cash Flow from Operations)			
	\$ 100,000		\$ (100,000)

APPENDIX 2

MARSHALL VALUATION SERVICE REVIEW

Marshall Valuation Service Review

Marshall Valuation Service – what it is, how it works.

To compare the cost of a proposed construction project to that of similar projects, as part of a cost-effectiveness analysis, a benchmark cost is typically developed using the Marshall Valuation Service (MVS). MVS cost data includes the base cost per square foot for new construction by type and quality of construction for a wide variety of building uses.

The base cost reported in the MVS guide are based on the actual final costs to the owner and include all material and labor costs, contractor overhead and profit, average architect and engineering fees, nominal building permit costs, and processing fees or service charges and normal interest on building funds during construction. It also includes normal site preparation costs including grading and excavation for foundations and backfill for the structure; and utilities from the lot line to the structure figured for typical setbacks.

The MVS costs *do not include* costs of buying or assembling land, piling or hillside foundations (these can be priced separately), furnishings and fixtures not found in a general contract, general contingency set aside for some unknown future event such as anticipated labor and material cost increases. Also not included in the base MVS costs are site improvements such as signs, landscaping, paving, walls, and site lighting. Offsite costs such as roads, utilities, and jurisdictional hook-up fees are also excluded from the base costs.⁴

MVS allows staff to develop a benchmark cost using the relevant construction characteristics of the proposed project and the calculator section of the MVS guide. In developing the MVS benchmark costs, the base costs are adjusted for a variety of factors (e.g., an add-on for sprinkler systems, the presence or absence of elevators, number of building stories, the height per story, and the shape of the building. The base cost is also adjusted to the latest month and the locality of the construction project.)

The MVS methodology does not offer data for renovation projects; thus, any effort to compare proposed renovation costs to a benchmark can only be made to the benchmarks for new construction.

⁴ Marshall Valuation Service Guidelines, Section 1, p. 3 (January 2016).

**Table 1: MHCC and UMMC Comparison Table
Calculation of Excess Construction Cost Over MVS Benchmark Value**

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Project Cost for MVS Comparison (SF)	\$ 546.27	\$ 546.27
Less MVS Benchmark Cost (SF)	\$ 504.77	\$ 506.13
Over (=Project Cost - MVS Benchmark - Abnormal Shortage Multiplier)	\$ 41.50	\$ 40.15
Square Footage (Cancer Center Tower)	190.062	190.062
Construction Costs over MVS Benchmark (Total Dollar Amount)¹	\$ 7,887,573	\$ 7,630,989
Percentage Construction Cost over MVS Benchmark	8.22%	7.93%
Contingency Allowance (Project budget)	\$ 15,000,000	\$ 15,000,000
Amount Contingency Allowance excluded²	\$ 1,233,235	\$ 0
Total to be excluded from any rate increase proposed by the hospital	\$ 9,120,808	\$ 7,630,989

¹Includes portion capitalized construction interest expenditure

²Using Percentage Construction Cost over MVS Benchmark

MHCC staff and UMC each calculated an allowable new construction cost that would be used in comparison with the MVS benchmark values for the proposed 190,062 SF cancer center tower. Table 1 provides a comparison of the MVS analysis by MHCC staff and UMMC for the revised proposed cancer center tower. MHCC staff calculated an estimated allowable new construction cost of \$546.27 per SF and an MVS benchmark of \$504.77 per SF. Comparably, the applicant arrived at the same estimated allowable new construction cost of \$546.27 per and an MVS benchmark value that higher at \$506.13 per SF.

Comparing Estimated Project Cost to the MVS Benchmark

MHCC’s analysis shows that the MVS allowable construction costs exceeded the MVS benchmark value by \$7,887,573. UMMC’s analysis shows that the allowable construction costs only exceed its calculated MVS benchmark value by \$7,630.989. The difference is due to slight differences in calculating the perimeter multiplier, a basic component in MVS analysis.

In determining costs to be excluded from future HSCRC rate increases, COMAR 10.24.10.04B(7), Construction Cost of Hospital Space states that:

If the projected cost per square foot exceeds the Marshall Valuation Service benchmark cost, any rate increase proposed by the hospital related to the capital cost of the project shall not include the amount of the projected construction cost that exceeds the Marshall Valuation Service benchmark

and those portions of the contingency allowance, inflation allowance, and capitalized construction interest expenditure that are based on the excess construction cost.

UMMC’s analysis includes the capitalized construction cost interest in its MVS comparison, and the proposed budget does not include an inflation allowance. The hospital did not include the portions of the contingency allowance in its calculations in determining the total construction costs excluded from any rate increase proposed by the hospital. Please see Table 2 below for Commission’s calculation of excluded dollar amounts from HSCRC rate increases.

**Table 2 –
MHCC Staff Calculation of Excess Cost - Cost Modification 2023
Includes Abnormal Shortage Multiplier**

Construction cost exceeding benchmark (\$41.50 x 190,062 SF)	\$ 7,887,573
The portion of future inflation that should be excluded (\$0 x 8.22 %)	\$ 0
The portion of the contingencies that should be excluded (\$15,000,000 x 8.22 %)	\$ 1,233,235
Total to be excluded from any rate increase proposed by the hospital related to the capital cost of the project	\$ 9,120,808

Therefore, MHCC staff is adding an additional condition issued with the April 2021 approval of UMMC cancer center tower project to exclude **\$9,120,808** from any partial rate adjustment application submitted to HSCRC in the future:

Any future change to the financing of this project involving adjustments in rates set by the HSCRC must exclude **\$9,120,808**, which includes the estimated new construction costs that exceed the Marshall Valuation Service guideline cost and portions of the contingency allowance and inflation allowance that are based on the excess construction cost.

APPENDIX 3

**HEALTH SERVICES COST REVIEW COMMISSION
MEMO**

**REQUEST FOR OPINION ON FINANCIAL
VIABILITY – POST APPROVAL PROJECT CHANGE**

MEMO

TO: Wynee Hawk, Director, Facilities Planning & Development, MHCC
Jeanne-Marie Gawel, Acting Chief, CON, MHCC
Moira Lawson, Program Manager, CON, MHCC

FROM: Jonathan Kromm, Executive Director, HSCRC
Jerry Schmith, Director, Revenue & Regulation Compliance, HSCRC
Bob Gallion, Associate Director III, Revenue & Regulation Compliance, HSCRC

DATE: October 13, 2023

RE: University of Maryland Medical Center (UMMC)
Greenebaum Comprehensive Cancer Center (GCCC)
Change after CON Approval for Construction
Docket No. 19-24-2438

Joshua Sharfstein, MD
Chairman

Joseph Antos, PhD
Vice-Chairman

James N. Elliott, MD

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This memo is in response to your request dated August 25, 2023, seeking our opinion on the financial feasibility of the amended project and review of the financial projections as provided in the Request for Post-Approval Project Change dated April 28, 2023. The request pertains to a Certificate of Need (CON) application previously approved by the Maryland Health Care Commission (MHCC) on August 20, 2020.

BACKGROUND:

The MHCC awarded a CON authorizing the original project on August 20, 2020, to construct a nine-story addition on the east side of the North Hospital building at the corner of Greene and Baltimore streets in Baltimore City. The approved project includes the addition of 62 beds to the hospital's existing physical bed capacity, approximately 155,000 square feet (SF) of new construction, and approximately 73,000 SF in renovations to contiguous existing space within the North Hospital. The MHCC approved \$194,368,000 in total use of funds for the project, including \$184,493,169 in current capital expenditures, a budgeted inflation allowance of \$9,374,831 for total capital costs of \$193,868,000, and \$500,000 in financing costs and other cash requirements. In connection with the CON, MHCC requested that the HSCRC opine on the financial feasibility of the project. As per our memo to you of July 31, 2020, HSCRC staff responded favorably.

THE PROJECT:

UMMC is requesting a project change to increase the capital costs associated with the project and to make changes in the physical plant design. Due to the changes in the physical plant design, UMMC is also seeking to remove one of the Conditions that was based on the approved project design.

UMMC states that the original project budget of \$194.4 million was based on contractors' cost estimates and market conditions when the application was submitted in 2019 and did not consider delays that would occur due to the COVID-19 pandemic. Since the filing, there has been a significant escalation in project costs; in addition, several needed renovation costs were not included in the original budget. Following the approval, several design changes have been made, improving the new facility's efficiency and the movement of patients, visitors, and materials. The applicant indicates that the increased project budget reflects the current cost estimates for the project.

The applicant states that the total project cost has increased significantly to \$269,190,180, an increase of \$74,822,180 or approximately 38.5%. UMMC states that most of the project cost increase is a result of a project delay, specifically the rise in labor and material costs resulting from the COVID-19 pandemic. UMMC also states that there were several enabling requirements that were not included in the original budget. These include the relocation of the infusion unit (\$400,000), renovations to the South Entrance during construction (\$1 million), renovation to the upper floor of the North Hospital building for the new service elevator tie-in (\$3 million), and other related renovations (\$500,000).

UMMC indicates that other significant project cost increases are due to changes in the project design. These include moving the apheresis and cell processing laboratory into the main hospital from the cancer center; building out space originally slated as shell space; slightly expanding the footprint of the new construction from 154,610 SF to 187,121 SF; and adding service elevators to provide adequate support for that portion of the hospital campus. The expanded footprint of the new building will reduce the total amount of renovated space by approximately 30,000 SF.

UMMC will pay for the additional capital costs using authorized bonds (\$50,965,495), related interest income (\$3,956,685), and increasing its philanthropy goal (\$20,000,000). According to the applicant, it has raised \$35 million in charitable contributions to date and fully expects to reach its target. UMMC plans the issuance of the bonds in CY 2024 and assumes a 5% borrowing rate in its projections. The applicant stated that \$100,000 in cash originally planned as a source will not be used for the project.

The applicant states it will not be seeking an increase in its Global Budget Revenue (GBR) related to this capital project with HSCRC.

HSCRC STAFF REVIEW, DISCUSSION AND OPINION:

HSCRC staff (Staff) reviewed the following materials: the Request for Post-Approval Project Change dated April 28, 2023; the Responses dated June 20, 2023, to Additional MHCC Information Questions dated May 17, 2023; the Responses dated August 16, 2023, to Additional MHCC Information Questions dated July 12, 2023; and the Responses dated August 16, 2023, to Additional HSCRC Information Questions dated July 14, 2023.

Staff studied the changes to the Uses of Funds as reflected in the Table E (Project Budget) as presented July 20, 2020, and that presented April 28, 2023. Cost of new construction rose \$83.9 million, while cost of renovations fell \$5.9 million consistent with the narratives explaining the changes in scope of the project and the cost escalations resulting both directly and indirectly from the pandemic. Staff noted the

maintenance of the contingency allowance at \$15 million and the elimination of the inflation allowance that was formerly \$9.4 million. As stated in its responses, the contingency allowance is related to the risks of discovery of subgrade unrecorded utilities and structures in this very old part of downtown. The inflation allowance dropped out as Guaranteed-Maximum-Price / Not-To-Exceed construction contracts were exercised in April 2023. Such changes to these allowances are considered reasonable. The cost of financing rose \$2.4 million – in its responses UMMC attributed such increase to CON assistance, legal fees, and bond placement fees. The cost of constructing the shell space on the 2nd and 3rd floors of the project building is approximately \$10.4 million, plus a share of the contingency allowance and capitalized interest. On October 10, 2023, MHCC did confirm to Staff a Marshall Valuation Service (MVS) exclusion of \$9,120,808.

Staff also studied the changes to the Sources of Funds reflected in the Table E (Project Budget) as presented July 20, 2020, and that presented April 28, 2023. Planned philanthropy grew from \$20 million to \$40 million – UMMC stated in its responses that to date, \$35 million has been realized. Planned borrowing via authorized bonds grew from \$78.5 million to \$100.2 million – UMMC stated in its responses that the debt has not yet been issued, and that such will likely be MHHEFA bonds to be issued in early CY2024. Interest income on bond proceeds grew from \$0 to \$4 million – UMMC stated in its responses that it plans to draw down bond proceeds over 36 months, with active construction over 24 months, and that invested proceeds are planned to earn interest at a 2.5% rate (a predictive test of earnings yielded an immaterial variance, and such was deemed reasonable). State Grants grew from \$95.8 million to \$125 million – UMMC provided in its responses a copy of the Capital Improvements Authorized by the Maryland General Assembly as of July 2022 under former Governor Hogan, which reflected \$125 million as authorized – The state plan reflects annual funding through 2026 to total \$125 million – UMMC stated in its responses that to date, \$5.2 million has been realized. And finally, cash from operations declined from \$100 thousand to \$0 – such source is deemed immaterial to the total budget.

As a preface to review of projected P&L projections, please note that performance improvements are planned and projected for FY 2024 of \$46.8 million and FY 2025 of \$11.7 million related to trading out high-cost contracted agency FTEs to less costly full time regular FTEs. Additionally, although UMMC has not projected a GBR capital award for incremental depreciation and interest related to this project, UMMC has reserved the option to pursue such award before the planned opening of operations in December 2026 or January 2027. The projected P&L Tables G, H, J and K were submitted and then resubmitted several times during this review. Staff's discussion is limited to the final Tables as submitted by the applicant and the pro forma Tables as produced by Staff.

Table H (P&L Inflated Entire Facility) as last resubmitted August 16, 2023, reflects top line patient service revenues to grow at an average annual rate of 3.43% following FY 2024, which is projected to be \$2.138 billion. No provision for a capital award to its GBR for incremental depreciation and interest is provided. Note that the presentation is inclusive of University Hospital and Shock Trauma and excludes the parent entity and non-hospital operations. Contra revenues are projected as 14.0% of gross revenues – Staff noted that the Table G projection (P&L Uninflated Entire Facility) reflects contra revenues as 14.9% of gross revenues, and Staff appreciates the more conservative projection. Payroll projections reflect the planned performance improvements in FY 2024 and FY 2025 and average annual inflation of 3.3% following FY 2023. Projected interest on project debt averaged \$7.7 million for the 4 years ended FY

2029 – such is not consistent with the debt amortization schedule on \$100.2 million borrowed over 30 years at a 5% rate with the first two years capitalized and thereafter expensed. The projected average annual depreciation is presented at \$11.8 million, which ties closely to the predictive test using an average useful life of depreciable assets acquired of 23 years. The applicant’s Table H reflects an average operating margin for the 4 years ending FY 2029 of a profit of \$41.0 million (or 1.7% of net operating revenue), and an average cash basis operating margin of \$145.4 million.

Staff prepared a pro forma presentation of Table H accounting for all the information reviewed. Top line patient service revenues for FY 2023 (\$2.120 billion) and FY 2024 (\$2.179 billion) are set equal to the respective GBR rate orders, and then grow at an average annual rate of 3.43% which was judged to be reasonable. No provision for a capital award to its GBR for incremental depreciation and interest is provided. Contra revenues are set at 14.9% across the board, to be conservative and consistent with Table G. The planned performance improvements on payroll were retained. Interest expense on project debt averages \$4.7 million for the 4 years ended FY 2029, to be consistent with the debt amortization schedule. The Staff’s pro forma Table H reflects an average operating margin for the 4 years ending FY 2029 of a profit of \$60.6 million (or 2.6% of net operating revenue) and an average cash basis operating margin of \$165.0 million.

Based upon review of all the information reviewed, Staff believes that subject to the realizability of philanthropy and state grants, and with prudent management, the GCCC project, as described in the Request for Post-Approval Project Change, remains initially feasible and viable on an ongoing basis, notwithstanding the 38.5% increase in the project’s budget.