



**MARYLAND**  
**Health Care**  
**Commission**

**DATE:** July 18, 2024

**TO:** Commissioners

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

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

Enclosed is the staff report and recommendation for a Request for a Second Project Change after a project approval submitted by University of Maryland Medical Center (UMMC). On August 20, 2020, the Maryland Health Care Commission (MHCC or 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 included 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 million, which UMMC would fund with a state grant of \$95.8 million, \$78.5 million in authorized bonds, \$10 million in cash, \$20 million in philanthropic donations and \$100,000 in cash. There was also a First Project Change approved on October 19, 2023, to increase the capital costs associated with the project, and to make changes in the physical plant design.

On April 26, 2024, UMMC requested a project change to increase the costs associated with the project to \$288,092,970 and make changes in the physical plant design. The cost increases are due to unplanned renovation costs in the existing hospital, which are outlined in Table 1.

UMMC states that an additional \$18,902,790 will be required for the relocation of key departments due to the planned construction (\$12,976,970), more extensive renovations needed for the South Entrance of the existing hospital (\$4,005,000), and miscellaneous enabling costs due to the renovations (\$1,000,000). Additionally, gross interest during construction will increase by \$844,270, and loan placement fees will increase by \$76,550. The cost increases will be paid for with \$10 million in cash, \$8.7 million in authorized bonds, and \$133,315 in interest income from authorized bonds.

The changes in physical plant design are due to the planned construction of 4 additional floors to the Cancer Center building to house the University of Maryland Rehabilitation and Orthopedic Institute, which is seeking approval in a separate application for an exemption for Certificate of Need ,(Docket No. 23-24-EX017). The

construction of the additional floors requires that the planned mechanical penthouse be moved from the tenth floor of the building to the fourteenth floor (see Appendix 4). Additionally, on the ninth floor, approximately 12,000 SF of the available 22,000 SF originally slated to be used by the Cancer Center will be occupied by UMROI.

Staff recommends that the Commission **APPROVE** the Second 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 and subsequent First Project Change on October 19, 2023, for the construction of the 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 \$18,035,730, 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

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BEFORE THE

UNIVERSITY OF MARYLAND

MARYLAND HEALTH

MEDICAL CENTER

CARE COMMISSION

DOCKET NO. 19-24-2438

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**STAFF REPORT  
SECOND 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 2023. The hospital allocates 579 of these licensed beds to medical/surgical/gynecological/addictions (MSGA) services, 30 for obstetric services, 59 for pediatric services, and 42 for acute psychiatric care.<sup>1</sup>

The Maryland Health Care Commission (MHCC or Commission) awarded a certificate of need (CON) on August 20, 2020, authorizing UMMC 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 to house the Greenbaum Comprehensive Cancer Center (Cancer Center or GCCC). The approved project included 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. The project would be paid for with State grants (\$96 million), authorized bonds (\$78 million), and philanthropy (\$20 million).

On October 19, 2023, the Commission approved a project change after CON approval to UMMC to increase the cost of the project to \$269,190,180 and to make changes in the physical plant design. The cost increase was attributed to delays in construction due to the COVID-19 pandemic, inflation and design changes to increase the efficiency of the new facility. The \$74 million in increased costs would be paid for with an increase in state grants (\$29.2 million), authorized bonds (\$21.7 million), philanthropy (\$20 million), and \$3.9 million in interest from authorized bonds.

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<sup>1</sup>[https://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs\\_hospital/documents/acute\\_care/chcf\\_acute\\_care\\_FY24%20Licensed%20Beds\\_20230717.pdf](https://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_hospital/documents/acute_care/chcf_acute_care_FY24%20Licensed%20Beds_20230717.pdf)

## **Summary of Requested Project Changes**

On April 26, 2024, UMMC requested a project change to increase the costs associated with the project to \$288,092,970 and make changes in the physical plant design. The cost increases are due to unplanned renovation costs in the existing hospital, which are outlined in Table 1.

UMMC states that an additional \$18,902,790 will be required for the relocation of key departments due to the planned construction (\$12,976,970), more extensive renovations needed for the South Entrance of the existing hospital (\$4,005,000), and miscellaneous enabling costs due to the renovations (\$1,000,000). Additionally, gross interest during construction will increase by \$844,270, and loan placement fees will increase by \$76,550. The cost increases will be paid for with \$10 million in cash, \$8.7 million in authorized bonds, and \$133,315 in interest income from authorized bonds.

The changes in physical plant design are due to the planned construction of 4 additional floors to the Cancer Center building to house the University of Maryland Rehabilitation and Orthopedic Institute, which is seeking approval in a separate application for an exemption for Certificate of Need ,(Docket No. 23-24-EX017). The construction of the additional floors requires that the planned mechanical penthouse be moved from the tenth floor of the building to the fourteenth floor (see Appendix 4). Additionally, on the ninth floor, approximately 12,000 SF of the available 22,000 SF originally slated to be used by the Cancer Center will be occupied by UMROI.

## **II. APPLICABLE REGULATIONS**

If an applicant desires to make a permissible change from a project that has received a Certificate of Need approval, it must seek approval from the Commission under COMAR 10.24.01.17. Any of the following changes would place a project at variance with its CON, and require advance Commission approval:

- (1) A significant change in physical plant design;
- (2) A capital cost increase that exceeds the approved capital cost inflated by an amount determined by applying the Hospital Capital Market Baskets published by IHS Markit in Health Care Cost Review or other guidance approved by the Commission and posted on the Commission website from the application submission date to the date of the filing of a request for a project change;
- (3) A change in the financing mechanisms of the project; and
- (4) A change to the location or address of the project.<sup>2</sup>

This project change 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) and an increase in capital costs under B(2).

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<sup>2</sup> COMAR 10.24.01.17B

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 \$18,826,240. 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*.<sup>3</sup> 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 \$274,044,494, or an inflationary allowance of \$7,723,314 (an approximately 2.9% increase from the costs approved by the Commission in 2023). This inflationary allowance is well below the estimated capital cost increase projected by UMMC (\$18,826,240 or about a 7.1% increase) for the completion of the project as now configured. Additionally, financing and planning costs have increased by \$76,550. Thus, Paragraph 17B (2) requires Commission authorization for the proposed cost increases.

**III. COST INCREASE AND FINANCIAL IMPACT OF THE REQUEST**

**Current Request Compared with the Budget Approved in the First Project Change**

UMMC states that the increases in capital costs for the project can be attributed to the relocation of a number of key departments and renovations of the existing hospital that will be more extensive than originally anticipated. None of the cost increase will be used for construction of the new tower. The breakdown of these increased costs can be found in Table 1.

**Table 1. Relocation and Renovation Cost Increases**

<b>Relocation Cost Items</b>	<b>Amount</b>
Relocation of Pediatric Specialty Care	\$325,000
Relocation of Pediatric Surgery Office	\$621,000
Relocation of Radiology Suite	\$1,279,067
Relocation of Gift Shop, Pastoral Care Department, Outpatient Registration, and Admitting	\$2,271,903
Relocation of Cancer Infusion Services	\$5,280,000
Renovation and Moves to Provide Connection to Service Elevators on North Hospital Upper Floors	\$3,200,000
<b>Relocation Subtotal</b>	<b>\$12,976,970</b>
South Entrance Cost Items	
G1 South Entrance Modification	\$1,600,000

<sup>3</sup>[https://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs\\_con/documents/2023\\_3rd\\_Qtr\\_cost\\_indexes%20cap\\_cost\\_modification\\_20231117.pdf](https://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_con/documents/2023_3rd_Qtr_cost_indexes%20cap_cost_modification_20231117.pdf)

South Entrance Exterior ADA ramp	\$600,000
Right of Way And Valet Accommodation	\$500,000
Scaffold Overhead Protection (South Entrance Canopy)	\$1,305,000
<b>South Entrance Subtotal</b>	<b>\$4,005,000</b>
Miscellaneous Costs	\$1,000,000
<b>Total Increase in Renovation Costs</b>	<b>\$17,981,970</b>

Source: UMMC April 26, 2024 Change Request pp. 4-5

UMMC stated that although the budget in the first request for a project change included a number of enabling costs, the amounts budgeted were insufficient. The proposed relocations are expected to be permanent moves with the exception of Cancer Infusion Services, which will relocate again to the newly constructed Cancer Center when complete. Additionally, UMMC states that the South entrance will serve as the main entrance of the hospital during construction and will require more extensive modifications than originally budgeted. Miscellaneous costs are attributed to temporary and/or permanent departmental moves and associated renovations to facilitate the new construction but do not have measurable square footage.

### **MVS Analysis**

The purpose of the Marshall Valuation Service (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.

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 nine-story Cancer Center tower and mechanical penthouse, derived using the MVS guide. Table 2 below provides the comparison of both MVS allowable construction costs with the MVS benchmark value.

**Table 2: MHCC and UMMC Comparison Table  
Calculation of Excess Construction Cost Over MVS Benchmark Value**

	<b>MHCC</b>	<b>UMMC</b>
Project Cost for MVS Comparison (SF)	\$ 546.27	\$ 546.27
Less MVS Benchmark Cost (SF)	\$ 465.14	\$ 505.42
Over (=Project Cost - MVS Benchmark -Abnormal Shortage Multiplier)	\$ 81.27	\$ 40.85
Square Footage (Cancer Center Tower) <sup>1</sup>	190.062	190.062
<b>Construction Costs over MVS Benchmark (Total Dollar Amount)<sup>1</sup></b>	<b>\$ 15,419,730</b>	<b>\$ 7,764,033</b>
Percentage Construction Cost over MVS Benchmark	17.44%	8.08%
Contingency Allowance (Project budget)	\$ 15,000,000	\$ 15,000,000
<b>Amount Contingency Allowance excluded<sup>2</sup></b>	<b>\$ 2,619,000</b>	<b>\$ 0</b>
<b>Total to be excluded from any rate increase proposed by the hospital</b>	<b>\$ 18,035,730</b>	<b>\$ 7,764,033</b>

<sup>1</sup>Includes portion capitalized construction interest expenditure

<sup>2</sup>Using Percentage Construction Cost over MVS Benchmark

MHCC staff calculated an estimated new construction cost of \$546.27 per SF and an MVS benchmark of \$465.14 per SF. Comparably, the applicant arrived at an estimated new construction cost of \$546.27 per SF and an MVS benchmark value of \$505.42 per SF. The difference in the MVS benchmark cost was due to a difference in the base cost applied to the mechanical penthouse. MVS prescribes that a mechanical penthouse has a base cost of \$134 per SF, significantly less than the \$392 per SF value used by UMMC (\$560 x a 0.7 mechanical space multiplier). In both the original application and the first change request, the mechanical penthouse was located on the ninth floor, sharing a floor with higher cost hospital space. The mechanical penthouse therefore justified the higher SF cost. The current plan for a mechanical penthouse on the 14<sup>th</sup> and 15<sup>th</sup> floor, sitting above any space used for hospital services, changes the method by which staff calculated the costs of such a space.

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.

With the approval of the first project change October 19, 2023, the Commission issued the

certificate of need with the following five 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.

Staff recommends amending the fifth previously approved condition to exclude the following amount from any partial rate adjustment applications submitted to Health Services Cost Review Commission (HSCRC) in the future:

Any future change to the financing of this project involving adjustments in rates set by the HSCRC must exclude \$18,035,730, 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 \$18,826,240, which will increase the authorized bonds by \$8,769,475. The remaining increase will be paid for with cash and interest. The applicant stated that it would not be seeking an increase in its Global Budget Revenue (GBR) related to this project. UMMC revenue and expense projections show that the hospital will remain profitable during the construction period even with the additional authorized bonds required to complete construction and renovation. While the Cancer Center will not begin operations until 2026 and net income will decrease steadily over the construction period, UMMC projects that net income will rebound to FY2024 levels by FY2029.

MHCC requested that the HSCRC provide an opinion on the financial viability of the proposed project, taking into consideration the proposed cost escalations. HSCRC staff responded on June 11, 2024, stating that they had reviewed this second 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 while funding from state grants may be optimistic, the projected average operating margins of \$62.3 million without inflation, and \$51.8 million with inflation, indicate that the tower project remains viable even if the funding is not fully realized.

In closing, HSCRC provides the following recommendation: "with prudent internal operating performance management, the GCCC project, as described in the Second Request for Post-Approval Project Change, remains initially feasible and viable through to completion and for two years following the commencement of operations. Staff holds this belief notwithstanding the 48% increase in this project's budget, and the 170% increase in the entire tower's cost since the initial application."

#### **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 project remains a more cost-effective alternative than constructing a new free-standing building or attempting to locate the cancer center within existing space at the hospital. With the revised condition related to construction cost of hospital space, this project still meets all relevant standards in the SHP. 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 June 11, 2024, 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 second request for a project change after issuance of a Certificate of Need, it is ordered on this 18<sup>th</sup> day of July 2024 that:

The Project Change Request by the University of Maryland Medical Center to its October

19, 2023 Modified Certificate of Need for the construction of a nine-story addition to its existing north tower to change the physical plant design and increase the total cost of the project to \$ 288,092,970 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 \$18,035,730, 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**

	Modified Approved CON Budget (10/17/23) Hospital Building1	New Proposed Budget, Hospital Building (April 2024)	Variance
<b>A. USE OF FUNDS</b>			
<b>1 CAPITAL COSTS</b>			
<b>a. New Construction</b>			
(1) Building	\$ 161,178,681	\$ 161,178,681	\$ -
(2) Fixed Equipment			\$ -
(3) Site and Infrastructure	\$ 17,454,319	\$ 17,454,319	\$ -
(4) Architect/Engineering Fees	\$ 15,190,000	\$ 15,190,000	\$ -
(5) Permits (Building, Utilities, Etc.)	\$ 660,000	\$ 660,000	\$ -
<b>SUBTOTAL</b>	<b>\$ 194,483,000</b>	<b>\$ 194,483,000</b>	<b>\$ -</b>
<b>b. Renovations</b>			
(1) Building	\$ 14,100,000	\$ 32,081,970	\$ 17,981,970
(2) Fixed Equipment (not included in construction)			
(3) Architect/Engineering Fees			
(4) Permits (Building, Utilities, Etc.)			
<b>SUBTOTAL</b>	<b>\$ 14,100,000</b>	<b>\$ 32,081,970</b>	<b>\$ 17,981,970</b>
<b>c. Other Capital Costs</b>			
(1) Movable Equipment	\$ 32,706,450	\$ 32,706,450	\$ -
(2) Contingency Allowance	\$ 15,000,000	\$ 15,000,000	\$ -
(3) Gross interest during construction period	\$ 10,031,730	\$ 10,876,000	\$ 844,270
(4) Other (Specify/add rows if needed)			\$ -
<b>SUBTOTAL</b>	<b>\$ 57,738,180</b>	<b>\$ 58,582,450</b>	<b>\$ 844,270</b>
<b>TOTAL CURRENT CAPITAL COSTS</b>	<b>\$ 266,321,180</b>	<b>\$ 285,147,420</b>	<b>\$ 18,826,240</b>
<b>d. Land Purchase</b>			
<b>e. Inflation Allowance</b>			
	\$ -	\$ -	\$ -
<b>TOTAL CAPITAL COSTS</b>	<b>\$ 266,321,180</b>	<b>\$ 285,147,420</b>	<b>\$ 18,826,240</b>
<b>2. Financing Cost and Other Cash Requirements</b>			
a. Loan Placement Fees	\$ 933,450	\$ 1,010,000	\$ 76,550
b. Bond Discount	\$ -		
c. CON Application Assistance			\$0 <sup>2</sup>
c1. Legal Fees	\$ 100,000	\$ 100,000	\$0 <sup>2</sup>
c2. Other (Accounting, Architectural, Planning)	\$ 1,039,400	\$ 1,039,400	\$ -
d. Non-CON Consulting Fees			
d1. Legal Fees	\$ 32,150	\$ 32,150	\$ -
d2. Other (third party peer review of documents; third party testing & scheduling, curtain wall testing)	\$ 764,000	\$ 764,000	\$ -
e. Debt Service Reserve Fund	\$ -		\$ -
f. Other (Specify/add rows if needed)			
<b>SUBTOTAL</b>	<b>\$ 2,869,000</b>	<b>\$ 2,945,550</b>	<b>\$ 76,550</b>
<b>3. Working Capital Startup Costs</b>			
<b>TOTAL USES OF FUNDS</b>	<b>\$ 269,190,180</b>	<b>\$ 288,092,970</b>	<b>\$ 18,902,790</b>
<b>B. Sources of Funds</b>			
1. Cash	\$ -	\$ 10,000,000	\$ 10,000,000
2. Philanthropy (to date and expected)	\$ 40,000,000	\$ 40,000,000	\$ -
3. Authorized Bonds	\$ 100,233,495	\$ 109,002,970	\$ 8,769,475
4. Interest Income from bond proceeds listed in #3	\$ 3,956,685	\$ 4,090,000	\$ 133,315
5. Mortgage			
6. Working Capital Loans			
7. Grants or Appropriations			
a. Federal			
b. State	\$ 125,000,000	\$ 125,000,000	\$ -
c. Local			
8. Other (Cash Flow from Operations)			\$ -
<b>TOTAL SOURCES OF FUNDS</b>	<b>\$ 269,190,180</b>	<b>\$ 288,092,970</b>	<b>\$ 18,902,790</b>

## **APPENDIX 2**

### **MARSHALL VALUATION SERVICE REVIEW**

## **Marshall Valuation Service Review**

### **Marshall Valuation Service – what it is, how it works**

In order 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.<sup>4</sup>

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.

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<sup>4</sup> Marshall Valuation Service Guidelines, Section 1, p. 3 (January 2016).

Table 1. MHCC and UMMC Comparison of MVS analysis

	New Construction			
Class	A			
Quality	Good			
	MHCC			UMMC
Type Structure	Hospital <sup>1</sup>	Mechanical Penthouse <sup>1</sup>	Total Hospital Building	Hospital + Penhouse
Floors <sup>2</sup>	13	3	16	16
Square Footage <sup>2</sup>	164,982	25,080	190,062	190,062
Average Perimeter	457	436		497
Weighted Average Wall Height	12' 6"	14		12.7
Stories	13	3		16
Average Area Per Floor	12,691	8,360		11,879
As Outlined in Section 1, Page 11				
<b>Base Cost</b>	<b>\$ 560.00</b>	<b>\$ 134.00</b>		<b>\$ 560.00</b>
Heating, Cooling, Ventilation adjustment	0	0		0
Adjusted Base Cost	\$ 560.00	\$ 134.00		\$ 560.00
Adjustment for Differential Cost By Department	0.895	1.000		0.87
<b>Gross Base Cost</b>	<b>\$ 501.20</b>	<b>\$ 134.00</b>		<b>\$ 486.96</b>
Perimeter Multiplier	0.939	0.981		0.95229
Story Height Multiplier	1.012	1.046		1.01603
Multi-story Multiplier	1.050	1.015		1.065
Multipliers	0.997	1.042		1.03
<b>Refined Square Foot Cost</b>	<b>\$ 499.84</b>	<b>\$ 139.56</b>		<b>\$ 501.79</b>
Sprinkler Add-on	\$ 3.85	\$ 3.85		\$ 3.68
<b>Adjusted Refined Square Foot cost</b>	<b>\$ 503.69</b>	<b>\$ 143.41</b>		<b>\$ 505.47</b>
Current Cost Modifier	1.03	1.03		1.01
Local Multiplier	0.99	0.99		0.99
CC & Local Multipliers	1.020	1.020		0.9999
<b>MVS Building Cost Per Square Foot</b>	<b>\$ 513.61</b>	<b>\$ 146.24</b>		<b>\$ 505.42</b>
<b>Building Square Footage</b>	<b>164,982</b>	<b>25,080</b>	<b>190,062</b>	<b>190,062</b>
<b>Total MVS Building Costs</b>	<b>\$ 84,737,011</b>	<b>\$ 3,667,665</b>	<b>\$ 88,404,676</b>	<b>\$ 91,751,121</b>
<b>Final MVS Cost Per Square Foot</b>	<b>\$ 513.61</b>	<b>\$ 146.24</b>	<b>\$ 465.14</b>	<b>\$ 505.42</b>

Source: UMMC Response May 20, 2024, pp 2-3

**Table 2: MHCC and UMMC Comparison Table  
Calculation of Excess Construction Cost Over MVS Benchmark Value**

	<b>MHCC</b>	<b>UMMC</b>
Project Cost for MVS Comparison (SF)	\$ 546.27	\$ 546.27
Less MVS Benchmark Cost (SF)	\$ 465.14	\$ 505.42
Over (=Project Cost - MVS Benchmark -Abnormal Shortage Multiplier)	\$ 81.13	\$ 40.85
Square Footage (Cancer Center Tower) <sup>1</sup>	190.062	190.062
<b>Construction Costs over MVS Benchmark (Total Dollar Amount)<sup>1</sup></b>	<b>\$ 15,419,730</b>	<b>\$ 7,764,033</b>
Percentage Construction Cost over MVS Benchmark	17.44%	8.08%
Contingency Allowance (Project budget)	\$ 15,000,000	\$ 15,000,000
<b>Amount Contingency Allowance excluded<sup>2</sup></b>	<b>\$ 2,616,000</b>	<b>\$ 0</b>
<b>Total to be excluded from any rate increase proposed by the hospital</b>	<b>\$ 18,035,730</b>	<b>\$7,764,033</b>

<sup>1</sup>Includes portion capitalized construction interest expenditure

<sup>2</sup>Using 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 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 new construction cost of \$546.27 per SF and an MVS benchmark of \$465.14 per SF. Comparably, the applicant arrived at the new construction cost of \$546.27 per SF and an MVS benchmark value of \$505.42 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 \$15,419,730. UMMC’s analysis shows that the allowable construction costs only exceed its calculated MVS benchmark value by \$7,764,033. The difference is due to the method by which the cost of the Mechanical Penthouse was calculated, and the subsequent calculation of each of the MVS multipliers.

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 3 below for Commission’s calculation of excluded dollar amounts from HSCRC rate increases.

**Table 3 –  
MHCC Staff Calculation of Excess Cost - Cost Modification 2023  
Includes Abnormal Shortage Multiplier**

Construction cost exceeding benchmark (\$71.14 x 190,062 SF)	\$ 15,419,730
The portion of future inflation that should be excluded (\$0 x 14.97 %)	\$ 0
The portion of the contingencies that should be excluded (\$15,000,000 x 14.97 %)	\$ 2,616,000
<b>Total to be excluded from any rate increase proposed by the hospital related to the capital cost of the project</b>	<b>\$ 18,035,730</b>

Therefore, MHCC staff is amending condition 5 of the October 2023 approval of a project change for the UMMC Cancer Center tower project to exclude **\$18,035,730** 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 **\$18,035,730**, 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**

**MEMORANDUM**

**TO:** Bob Gallion, Associate Director, HSCRC  
**FROM:** Moira Lawson, CON Analyst, MHCC  
**DATE:** May 15, 2024  
**RE:** **UMMC Construction of Addition for the Cancer Center  
Docket No. 19-24-2438 – Second Change after CON Approval**

\*\*\*\*\*

**Applicant**

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 806 acute care beds in FY 2020.<sup>5</sup> The hospital allocates 668 of these licensed beds to medical/surgical/gynecological/addictions (MSGA) services, 35 for obstetric services, 59 for pediatric services, and 44 for acute psychiatric care.<sup>6</sup>

**Project Description**

The Maryland Health Care Commission (MHCC or 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 original approved project included 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 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.

In August 2023, UMMC requested a project change to increase the total costs associated with the project to

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<sup>5</sup> Because of the Covid-19 State of Emergency, the Secretary of Health suspended the annual adjustment of licensed acute care hospital bed capacity. Thus, at this time, licensed acute care hospital bed capacity established in FY 2020 remains in effect for FY 2021, which began on July 1, 2020.

<sup>6</sup> MHCC Acute Care Hospital Inventory FY 2019  
[https://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs\\_hospital/documents/acute\\_care/chef\\_Licensed\\_Acute\\_Care\\_Beds\\_by\\_Hospital\\_and\\_Service\\_%20Maryland\\_FY2020.pdf](https://mhcc.maryland.gov/mhcc/pages/hcfs/hcfs_hospital/documents/acute_care/chef_Licensed_Acute_Care_Beds_by_Hospital_and_Service_%20Maryland_FY2020.pdf).

\$269,190,180, and to make changes in the physical plant design. UMMC stated 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 stated that there were a number of enabling requirements that were not included in the original budget at a cost of \$4.9 million.

UMMC planned to 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 percent borrowing rate in its projections. The applicant stated that \$100,000 in cash that was originally slated would not be used for the project.

### Second Project Change Request

On April 26, 2024, UMMC submitted a second project change request post-CON approval. UMMC stated that due to a related CON Exemption request to add 4 floors of occupiable space to the top of the approved CON the Cancer project, changes would have to be made to the approved building. The mechanical penthouse, previously located on the 10th floor of the building would now be located on the 14<sup>th</sup> floor. Additionally, significant changes would be made to the renovated portions of the existing project.

With the structural changes to the new construction, UMMC stated there would be a \$18 million dollar increase in capital costs due to additional relocation and enabling costs that were not anticipated in the first project change. Additional funds needed for relocating services are shown in Table 1.

Table 1: Additional Funds

<b>Relocation Items</b>	<b>Cost</b>
Pediatric Specialty Care	\$325,000
Pediatric Surgery Office	\$621,000
Radiology Suite	\$1,279,067
Gift Shop, Pastoral Care, Outpatient Registration, Admissions	\$2,271,903
Cancer Infusion Services	\$5,280,000
Moves to connect to service elevators on North Hospital upper floors	\$3,200,000
South Entrance	\$4,005,000
<b>Total</b>	<b>\$16,981,970</b>

Additionally, UMMC expects to spend an additional \$1 million in miscellaneous costs associated with the construction of the Cancer Center, leading to a \$17,981,970 increase in capital costs.

UMMC seeks a modification of project costs to increase its total costs, including financing costs, by \$18,902,790, bringing the total project costs to \$288,092,970. If approved, UMMC will pay for the additional capital costs using cash (\$10 million) and authorized bonds (\$8,769,475) and related interest income (\$133,315). Unlike in either the original application, or in the second modification, UMMC does not say that they will not ask for a rate adjustment for this increase in project costs.

Please provide HSCRC’s opinion on this project's viability/financial feasibility. It would be helpful to have your response by May 29, 2024. If you have any questions on this matter, please contact me at (410) 764-3232.

Moira Lawson, CON Analyst

cc: Wynee Hawk, Director, Center for Health Facility Policy and Planning  
Jeanne-Marie Gawel, Acting CON Chief  
Jon Kromm, Executive Director, HSCRC  
Jerry Schmith, Deputy Director, HSCRC  
Thomas C. Dame, Gallagher Evelius & Jones LLP  
Ella R. Aiken, Gallagher Evelius & Jones LLP

## MEMO

**TO:** Wynee Hawk, Director, Facilities Planning & Development, MHCC  
Jeanne-Marie Gawel, Acting Chief, CON, MHCC  
Moira Lawson, Program Manager, CON, MHCC  
Rachel Bervell, Program Manager, CON, MHCC  
Bill Chan, 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:** July 9, 2024

**RE:** University of Maryland Medical Center (UMMC)  
Greenebaum Comprehensive Cancer Center (GCCC)  
Second Change after CON Approval for Construction  
Docket No. 19-24-2438  
and  
University of Maryland Rehabilitation & Orthopaedics Institute (UMROI)  
Request for Exemption from Certificate of Need (CON) for Merger  
Docket No. 23-24-EX017

.....

This memo serves as an addendum to the response memos previously directed to you dated May 7, 2024, and June 11, 2024, regarding the above referenced projects.

You have recently brought to our attention that subsequent to the release of the aforementioned response memos, the applicant and MHCC together reviewed the costs, intended uses, and final square footage measurements, of all the spaces included in the proposed 14-floor tower currently under construction (the Len Stoler Center for Advanced Medicine). These include the lower 9 floors to house the GCCC, the upper 4 floors to accommodate the UMROI merger, and the top floor penthouse for positioning mechanical utilities. The purpose of the review was to confirm the final determination of the Marshall Valuation Service (MVS) exclusion value of costs exceeding the MVS benchmark value. You have indicated that the applicant has attributed two thirds (2/3) of the cost of the penthouse floor to the GCCC, and one third (1/3) of that cost to the UMROI addition. As previously documented, this attribution is judged to be reasonable.

Consistent with the P&L projections as presented for the two named projects housed within this single tower construction, the applicant states that it will not be seeking an increase in its Global Budget Revenue (GBR) for incremental capital related expenses related to this tower project. However, the applicant has stopped short of pledging to forego seeking an award for incremental capital related operating expenses for the life of the tower project. The combined project budget for this Len Stoler tower is \$523,948,000 (that is \$288,093,000 for the GCCC project plus \$235,855,000 for the UMROI project). You have confirmed to us that notwithstanding previously shared computations included in the dated response memos, the final cumulative cost of the value agreed upon between the applicant and MHCC to be excluded from any future GBR capital award computation for

the incremental expense of depreciation and interest, if requested by the applicant upon completion of the Len Stoler tower, is \$26,355,000 (that is \$18,036,000 for the GCCC project plus \$8,319,000 for the UMROI project).

This addendum does not alter the affirmative but contingent conclusions regarding initial feasibility and viability through to completion and for two years following commencement of operations of these two projects as previously documented.

Cc: Allan Pack, Director, Population-Based Methodologies, HSCRC

## **APPENDIX 4**

### **BUILDING SCHEMATIC**



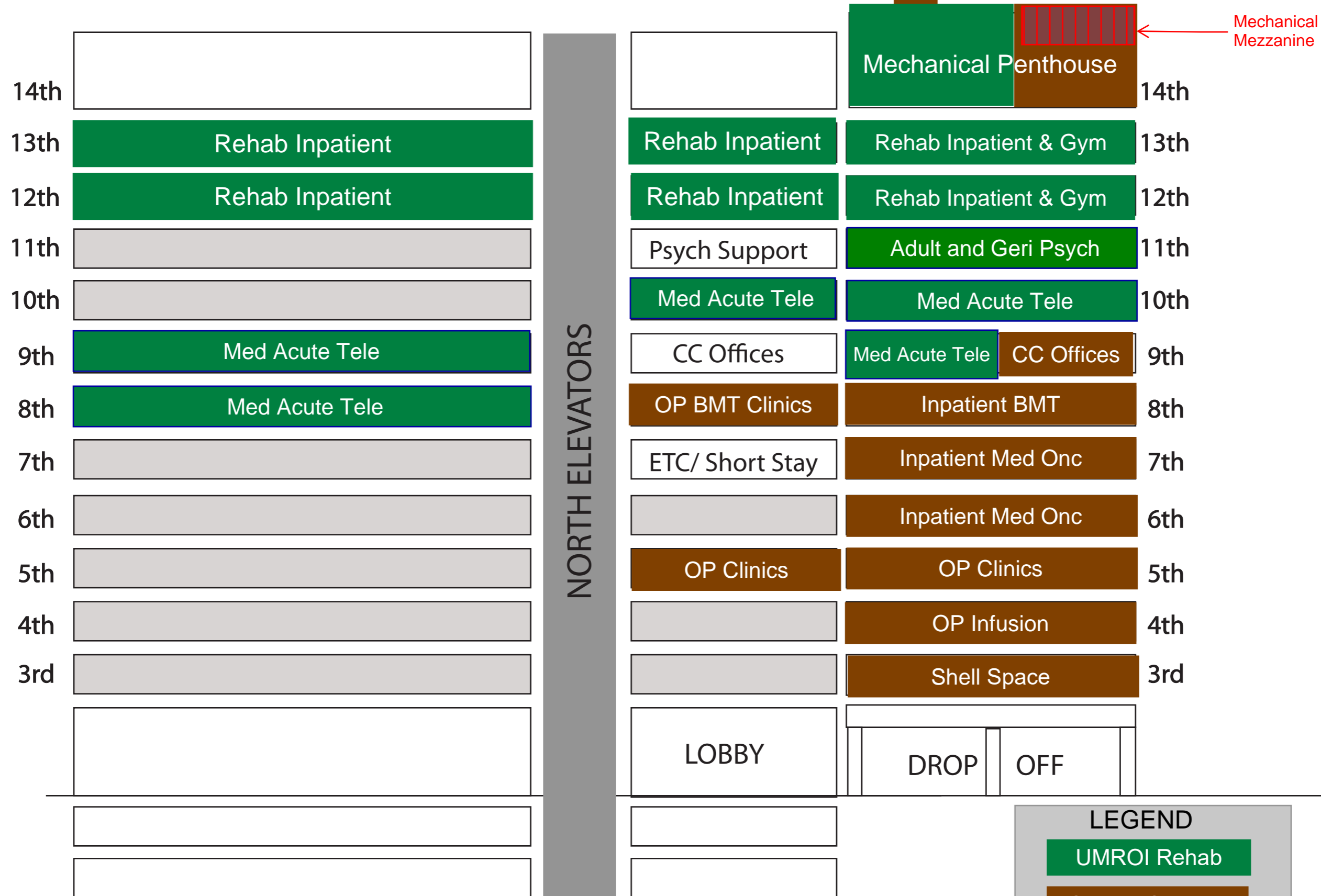
# Existing North Hospital

# Stoler Center

Roof

Service Elevator Mechanical

Roof



NORTH ELEVATORS

**LEGEND**

- UMROI Rehab
- Cancer Center