IN THE MARYLAND HEALTH CARE COMMISSION

Matter No. 17-12-EX003

MODIFIED REQUEST FOR EXEMPTION FROM CERTIFICATE OF NEED REVIEW

to

Merge and Consolidate UM Upper Chesapeake Medical Center
and UM Harford Memorial Hospital

Joint Applicants

UM Upper Chesapeake Medical Center, Inc. and
UM Harford Memorial Hospital, Inc.

October 21, 2019

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AND HARFORD MEMORIAL HOSPITAL	*	

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MODIFIED REQUEST FOR EXEMPTION
FROM CERTIFICATE OF NEED REVIEW
MERGER AND CONSOLIDATION OF HARFORD MEMORIAL HOSPITAL
AND UPPER CHESAPEAKE MEDICAL CENTER

University of Maryland Upper Chesapeake Medical Center, Inc. ("UCMC") and Harford Memorial, Inc. ("HMH"), by their undersigned counsel, seek approval from the Maryland Health Care Commission (the "Commission") to relocate medical/surgical/gynecological/addictions ("MSGA") beds from HMH to UCMC and to construct a three story addition to UCMC pursuant to a merger and consolidation of these two facilities in accordance with COMAR 10.24.01.02(A)(3)(c) and 10.24.01.04(A)(4)-(5). For the reasons set forth more fully below, UCMC and HMH respectfully request that the Commission grant an exemption from Certificate of Need ("CON") Review.

BACKGROUND

HMH is an acute care hospital with fifty-one (51) licensed MSGA beds and thirty-one (31) licensed psychiatric beds located in Havre de Grace. UCMC is a 161-bed licensed acute care hospital, with 149 MSGA beds, 10 obstetrics beds, and 2 pediatric beds located in Bel Air. HMH and UCMC are the sole acute general hospitals located in Harford County. Both HMH and UCMC are owned and operated by the University of Maryland Upper Chesapeake Health System ("UM UCH"), a community based, not-for-profit health system. UM UCH is dedicated to maintaining and improving the health of the people in the communities it serves through an integrated health delivery system that provides the highest quality of care to all. UM UCH has been affiliated with the University of Maryland Medical System ("UMMS") since 2009, and in late 2013, UM UCH formally merged into UMMS in order to continue its commitment to the growing northeast Maryland area with expanded clinical services, programs and facilities, and physician recruitment. In addition to HMH and UCMC, UM UCH consists of the: (1) Patricia D. and M. Scot Kaufman Cancer Center (an affiliate of the University of Maryland Marlene and Stewart Greenebaum Cancer Center) located on the campus of UCMC; (2) the Klein Ambulatory Care Center located on the campus of UCMC; (3) the Senator Bob Hooper House, a residential

hospice facility in Forest Hill; and (4) Upper Chesapeake Medical Services, a physician practice group.

HMH was constructed in phases between 1943 and 1972. Although UM UCH has been committed to maintaining the facility and has undertaken capital expenditures to make infrastructure, clinical equipment, and information technology improvements, the existing physical plant has outlived its useful life. Renovation of the facility is not cost-effective and the nine (9) acre site in downtown Havre de Grace is surrounded by existing developed parcels, limiting a practical opportunity for renovation or expansion. Consistent with local and national healthcare trends and to best promote access to convenient and quality care for the population it serves, UM UCHS proposes to transition portions of HMH to a multi-service facility to be located on an approximate 35.63 acre property known as the Upper Chesapeake Health Medical Campus at Aberdeen ("UC Medical Campus at Aberdeen"), four and four-fifths (4.8) miles from the existing HMH campus and conveniently located near Interstate 95. Contemporaneous with this Modified Request for Exemption from CON review, HMH and UCMC, as joint applicants, have filed a Modified Request for Exemption to convert HMH to a freestanding medical facility to be located on the UC Medical Campus at Aberdeen, and UM UCH has filed a Modified CON Application to establish a thirty-three (33) bed special psychiatric hospital which will be connected to and located above the freestanding medical facility.

Upon conversion of HMH to a freestanding medical facility, there will be loss of MSGA bed capacity in Harford County. The Commission projects a minimum need of 168 MSGA beds for Harford County in 2025 and a maximum MSGA bed need of 223. Maryland Register, v. 44, Issue 2 (Jan. 20, 2017). UCMC is presently licensed for only 149 MSGA beds – less than the Commission's projected minimum need. Thus, upon conversion of HMH to a freestanding medical facility, Harford County will clearly have a need for additional MSGA bed capacity. As discussed more fully herein, in fiscal year 2024, following the conversion of HMH to a freestanding medical facility, the Applicants have projected a need for UCMC to have 212 MSGA beds and 45 observation beds.

UCMC proposes to transfer all existing MSGA bed capacity from HMH to UCMC when HMH converts to a freestanding medical facility, which is projected to occur in fiscal year 2022, up to a maximum of all licensed MSGA beds at UCMC. UCMC proposes to construct a three-story, 78,870 square foot addition above the Kaufman Cancer Center to house a thirty (30) bed MSGA inpatient unit on fifth floor and a forty-two (42) bed dedicated observation unit on the fourth floor. UCMC will house additional MSGA beds to be transferred from HMH through existing physical bed capacity that is presently used for both inpatients and observation patients. Because the Kaufman Cancer Center was designed to accommodate vertical expansion and is one of the final locations on the UCMC campus that is capable of being developed, UCMC also proposes to construct one floor of shell space to accommodate needed expansion of the Kaufman Cancer Center within the next three years. The proposed addition has been designed in accordance with applicable building codes and the Facilities Guidelines Institute, Guidelines for Design and Construction of Hospitals and Outpatient Facilities 2018 Edition ("FGI Guidelines"). A more detailed description of the project is provided below.

DISCUSSION

MARYLAND CODE, HEALTH-GENERAL §§ 19-120(j) permits a hospital to increase the volume of an existing health care service if the proposed change: (i) is pursuant to the merger of two or more health care facilities, (ii) is not inconsistent with the State Health Plan; (iii) will result in the delivery of more effective and efficient service, and (iv) is in the public interest. Similarly, COMAR 10.24.01.02(A)(3)(c) provides that a CON is not required to change the bed capacity of a hospital if the change in bed capacity is "proposed pursuant to a merger or consolidation between health care facilities" and the Commission finds that the change is not inconsistent with the State Health Plan, will result in the delivery of more efficient and effective health care services, and is in the public interest. The Commission may also exempt the requirement of CON review and approval for capital expenditures and changes in the scope of health care services offered by a health care facility if done as part of a consolidation or merger of two hospitals. HEALTH-GENERAL § 19-120(k)(6)(v); COMAR 10.24.01.04(A)(4)-(5).

HEALTH-GENERAL § 19-120(a)(1)(2) defines "consolidation" or "merger" to include "increases or decreases in bed capacity or services among the components of an organization that: (i) operates more than one health care facility[.]" "Health care facility" is defined to include a "hospital." COMAR 10.24.01.01(B)(12). "Health care service means any clinically related patient service," including a "medical service." HEALTH-GENERAL § 19-120(a)(3)(i)-(ii). In turn, a "medical service" includes "medicine, surgery, gynecology, addictions." *Id.* § 19-120(a)(5); COMAR 10.24.01.01(B)(27).

Because UCMC and HMH are both owned and operated by UM UCH, the relocation of MSGA bed capacity from HMH to UCMC constitutes a consolidation or merger in accordance with HEALTH-GENERAL § 19-120(a)(1)(2) and COMAR 10.24.01.02(A)(3)(c). Further, the proposed MSGA bed relocation and associated capital expenditures are not inconsistent with the State Health Plan, will result in the delivery of more efficient and effective health care services, and are in the public interest.

COMPREHENSIVE PROJECT DESCRIPTION

The existing Kaufman Cancer Center opened in 2013. It occupies two stories above the garden level parking garage but was designed to accommodate an additional three floors of vertical expansion. The proposed expansion project will provide 26,290 square of additional space on each of three floors. Level 3, the first floor of new construction will be constructed as shell space, with a horizontal connection to UCMC's existing top floor (the existing hospital is a total of three stories above the garden level). Level 4 will house a new dedicated observation unit consisting of a total of forty-two (42) beds, consisting of twenty-one (21) semi-private rooms. Each of the semi-private rooms will have a private en suite toilet/shower rooms – one for each observation bed/patient. Level 5 will house a thirty (30) bed MSGA unit, consisting of private rooms as well as office space.

In support of the additional beds, 12,000 square feet on the existing Hospital Garden (Ground) Level will be renovated to expand support services and the food services department (kitchen). Also, an 8,960 square foot addition will be constructed to provide additional EVS, IT,

and support service space, and 250 square feet on Level 1 of the Cancer Center will be renovated to accommodate the Fire Command Center required for a high-rise building.

To separate traffic flows to/from the inpatient and observation units from traffic flows to/from the Cancer Center at the existing public elevator bank, a new and separate 240 square foot public elevator lobby will be provided. A 510 square foot addition on Level 1 will therefore relocate toilets currently at the location of this new lobby. An equal addition on Level 2 will provide additional toilets needed to support existing outpatient services on Level 2.

To accommodate the increased mechanical and electrical loads required by the building expansion, modifications to the existing free-standing Central Utility Plant will be necessary. Two 550-ton electric centrifugal chillers and associated pumps will be installed to meet the increased loads and provide redundancy in case of a chiller failure. The existing cooling towers, currently located within an enclosure on grade, will be replaced with four 625-ton units to serve the expanded chiller plant.

The existing high pressure steam boilers in the central plant will remain, with heating for the new vertical addition to be provided by the existing steam converters in the existing Cancer Center Mechanical Equipment Room, and new, gas-fired condensing hot water boilers, that will be located in the Cancer Center Mechanical Equipment Room, to back-feed the existing Cancer Center.

The existing fire pump and controller will be replaced in-kind with a higher-pressure pump, to meet the higher pressure demands at the tops of the standpipes. Two new 1,500KW generators and associated paralleling gear will be provided on the roof of the Central Plant to back up all emergency power in the hospital and a portion of the Central Utility Plant. This approach would automatically adjust for a single generator failure. All rooftop equipment will be appropriately screened.

Existing site electrical utilities (normal power from BGE) are adequate for the expansion. The natural gas service to the central plant will require an upgrade to accommodate the increased load for the new hot water boilers and gas fired humidifiers in the building. As part of this project, UM-UCH will be extending a second source of domestic water to the Central Utility Plant from the existing main in MacPhail Road. All other utilities are currently sufficient to service this addition.

The total project budget is $84,406,807. The proposed project as well as the other capital projects for which UM UCH and its constituent hospitals have sought approval from the Commission will be funded through a combination of $214.3 million in tax exempt debt and $4.0 million of interest earned on bond proceeds. The bonds are anticipated to be issued in fiscal year 2020 through the University of Maryland Medical System.

Construction of the proposed project is projected to take approximately 18 months but will not open until HMH is converted to a freestanding medical facility which is projected to take place in 2022. UCMC has provided project drawings at **Exhibit 2**. UCMC has also completed hospital CON **Tables A**, **B**, **C**, **D**, **E**, **I, J**, and **K**, which are related to the proposed project, as well as the projected utilization and financial performance of UCMC, inclusive of the UC FMF

which becomes a department of UCMC beginning in fiscal year 2022. These tables are included with **Exhibit 1**. **Table I** includes utilization projections that reflect both the inpatient and outpatient utilization of UCMC and outpatient emergency department visits, observation cases, and related outpatient ancillary services at UC FMF. Also enclosed with **Exhibit 1** are **Tables F**, **G**, and **H** that cover the entire utilization and financial performance of all UM UCH hospital facility components, including UCMC and HMH during the period from fiscal year 2015 to fiscal year 2021 and UCMC, UC FMF, and UC Behavioral Health between fiscal years 2022 and 2024. The financial projection assumptions related to revenue, expenses and financial performance underlying **Tables G**, **H**, **J,** and **K** are also provided with **Exhibit 1**.

II. CONSISTENCY WITH THE STATE HEALTH PLAN

10.24.10.04 Standards.

A. General Standards.

(1) Information Regarding Charges.

Information regarding hospital charges shall be available to the public. After July 1, 2010, each hospital shall have a written policy for the provision of information to the public concerning charges for its services. At a minimum, this policy shall include:

(a) Maintenance of a Representative List of Services and Charges that is readily available to the public in written form at the hospital and on the hospital's internet web site;

(b) Procedures for promptly responding to individual requests for current charges for specific services/procedures; and

(c) Requirements for staff training to ensure that inquiries regarding charges for its services are appropriately handled.

Applicants' response: UM UCH's policy relating to transparency in health care pricing complies with this COMAR 10.24.10.04(A)(1), and attached as **Exhibit 3**. This policy is currently implemented at both UCMC and HMH. [UM UCH's charity care policy complies with the requirements of COMAR 10.24.10.04A(2).

(2) Charity Care Policy.

Each hospital shall have a written policy for the provision of charity care for indigent patients to ensure access to services regardless of an individual's ability to pay.

(a) The policy shall provide:

(i) Determination of Probable Eligibility. Within two business days

following a patient's request for charity care services, application for medical assistance, or both, the hospital must make a determination of probable eligibility.

(ii) Minimum Required Notice of Charity Care Policy.

1. Public notice of information regarding the hospital's charity care policy shall be distributed through methods designed to best reach the target population and in a format understandable by the target population on an annual basis;

2. Notices regarding the hospital's charity care policy shall be posted in the admissions office, business office, and emergency department areas within the hospital; and

3. Individual notice regarding the hospital's charity care policy shall be provided at the time of preadmission or admission to each person who seeks services in the hospital.

Applicants' response: UM UM UCH's Financial Assistance Policy, implemented at both UCMC and HMH, complies with this standard and is attached as **Exhibit 4**. Section 4(d) on page 6 of UM Upper Chesapeake Health's Financial Assistance Policy provides, "[w]ithin two (2) business days following a patient's request for Financial Assistance, application for Medical Assistance, or both, the hospital will make a determination of probable eligibility." This policy will be implemented at UC FMF when it opens.

Along with **Exhibit 4**, UM UCH is also enclosing its Financial Assistance Form, instructions to patients and financially responsible persons concerning completion of its Financial Assistance Application Form, a follow-up letter to patients regarding probable eligibility, and the current schedule of federal poverty levels used to make eligibility determinations.

Notices regarding UM UCH's financial assistance policy are currently posted in UM UCH's respective admissions offices, business offices, and emergency department areas. Additionally, UM UCH publishes notice annually in the Harford County Aegis in the form attached as **Exhibit 4**. Further, UM UCH's Financial Assistance Policy and related materials are available on UM UCH's website at the following URL:

https://www.umms.org/uch/patients-visitors/for-patients/financial-assistance

As set forth in UM UCH's Financial Assistance Policy, patients will be deemed presumptively eligible for financial assistance if they qualify pursuant to one or more of fourteen (14) enumerated criteria, including:

I. Active Medical Assistance pharmacy coverage
II. Special Low Income Medicare Beneficiary (SLMB) coverage

(covers Medicare Part B premiums)

III. Homelessness

IV. Medical Assistance and Medicaid Managed Care patients for services provided in the ED beyond coverage of these programs

V. Maryland Public Health System Emergency Petition (EP) patients (balance after insurance)

VI. Participation in Women, Infants and Children Program (WIC)

VII. Supplemental Nutritional Assistance Program (SNAP)

VIII. Eligibility for other state or local assistance programs

IX. Deceased with no known estate

X. Determined to meet eligibility criteria established under former State Only Medical Assistance Program

XI. Households with children in the free or reduced lunch program

XII. Low-income household Energy Assistance Program

XIII. Self-Administered Drugs (in the outpatient environment only)

XIV. Medical Assistance Spenddown amounts

Even if a patient does not qualify for presumptive eligibility, a probable eligibility determination may be made based on verbal or documented income levels and number of family members. Following a determination of probable eligibility, the follow-up letter enclosed with **Exhibit 4** is mailed to patients within two business days. UM UCH also reserves the right to make eligibility determinations without a formal application from its patients.

(b) A hospital with a level of charity care, defined as the percentage of total operating expenses that falls within the bottom quartile of all hospitals, as reported in the most recent Health Service Cost Review Commission Community Benefit Report, shall demonstrate that its level of charity care is appropriate to the needs of its service area population.

Applicants' response: As shown in **Table 1** below, neither HMH nor UCMC are in the bottom quartile in terms of the percentage of charity care to total operating expenses for acute general hospitals in the State of Maryland. This standard is inapplicable.

Table 1
HSCRC Community Benefit Report, Data Excerpts
FY2017

Hospital Name	Total Hospital Operating Expense	CB Reported Charity Care	%	
Holy Cross Hospital	$413,796,889	$31,396,990	7.59%	1st Quartile
Garrett County Hospital	$46,818,203	$2,792,419	5.96%	
St. Agnes	$433,986,000	$21,573,282	4.97%	
Doctors Community	$193,854,072	$6,756,740	3.49%	
Adventist Washington Adventist*	$219,120,045	$7,442,497	3.40%	
Western Maryland Health System	$322,835,314	$10,385,555	3.22%	
UM Prince Georges Hospital Center	$286,955,092	$9,166,191	3.19%	

Mercy Medical Center	$464,031,500	$14,411,600	3.11%	
Holy Cross Germantown	$97,124,985	$2,819,650	2.90%	
Johns Hopkins Bayview Medical Center	$613,834,000	$16,951,000	2.76%	
UM Laurel Regional Hospital	$93,884,647	$2,521,365	2.69%	
UM Midtown	$204,226,000	$5,174,000	2.53%	
Frederick Memorial	$350,118,000	$8,081,000	2.31%	2nd Quartile
UM Harford Memorial	$84,926,000	$1,927,000	2.27%	
Atlantic General	$117,342,233	$2,569,517	2.19%	
Ft. Washington	$42,883,433	$928,769	2.17%	
UM Baltimore Washington	$334,210,000	$6,703,000	2.01%	
Calvert Hospital	$135,047,535	$2,694,783	2.00%	
Peninsula Regional	$432,141,737	$8,301,400	1.92%	
McCready	$16,564,839	$307,205	1.85%	
UM St. Joseph	$341,335,000	$6,105,000	1.79%	
UM SMC at Dorchester	$42,909,000	$647,362	1.51%	
MedStar Harbor Hospital	$187,002,302	$2,816,043	1.51%	
Meritus Medical Center	$309,163,913	$4,596,841	1.49%	3rd Quartile
UM SMC at Easton	$190,646,000	$2,786,102	1.46%	
MedStar St. Mary's Hospital	$168,757,516	$2,458,649	1.46%	
MedStar Good Samaritan	$282,735,786	$4,078,427	1.44%	
UMMC	$1,470,095,000	$20,308,000	1.38%	
Howard County Hospital	$260,413,000	$3,368,222	1.29%	
UM Charles Regional Medical Center	$117,918,178	$1,474,409	1.25%	
MedStar Southern Maryland	$243,629,886	$3,014,042	1.24%	
Lifebridge Northwest Hospital	$240,547,439	$2,734,207	1.14%	
Shady Grove*	$323,661,835	$3,646,551	1.13%	
Suburban Hospital	$283,346,000	$3,168,000	1.12%	
UM Upper Chesapeake	$284,219,000	$3,014,000	1.06%	
MedStar Franklin Square	$508,539,888	$5,147,814	1.01%	4th Quartile
MedStar Union Memorial	$443,482,532	$4,426,976	1.00%	
Johns Hopkins Hospital	$2,307,202,000	$21,697,000	0.94%	
Union Hospital of Cecil County	$157,260,383	$1,411,673	0.90%	
LifeBridge Sinai	$727,868,000	$6,526,756	0.90%	
MedStar Montgomery General	$160,725,287	$1,322,823	0.82%	
UM SMC at Chestertown	$46,048,000	$373,000	0.81%	
Anne Arundel Medical Center	$561,392,000	$4,450,854	0.79%	
Bon Secours	$113,068,120	$675,245	0.60%	
GBMC	$419,396,862	$2,085,315	0.50%	
Carroll Hospital Center	$197,802,000	$790,716	0.40%	
All Hospitals	**$15,292,865,451**	**$276,027,989**	**1.80%**	
Excluded:				
Levindale	$73,760,005	$1,341,932	1.82%	
UM Rehabilitation and Ortho Institute	$107,006,000	$2,271,000	2.12%	
Adventist Rehab of Maryland*	$43,589,181	$502,712	1.15%	
Sheppard Pratt	$221,570,405	$5,473,873	2.47%	
Adventist Behavioral Health Rockville*	$40,204,927	$1,451,432	3.61%	
Mt. Washington Pediatrics	$55,412,291	$382,465	0.69%	
* The Adventist Hospital System has requested and received permission to report their Community Benefit activities				

on a CY Basis. This allows them to more accurately reflect their true activities during the Community Benefit Cycle. The numbers listed in the FY 2017 Amount in Rates for Charity Care, DME, and NSPI Column as well as the Medicaid Deficit Assessments from the Inventory spreadsheets reflect the Commission's activities for FY17 and therefore will be different from the numbers reported by the Adventist Hospitals.

Source: http://www.hscrc.state.md.us/Documents/HSCRC_Initiatives/CommunityBenefits/CBR-FY17/FiscalYear17HCBFinancialReport20180501.xlsx (last visited September 19, 2019).

(3) Quality of Care.

An acute care hospital shall provide high quality care.

(a) Each hospital shall document that it is:

(i) Licensed, in good standing, by the Maryland Department of Health and Mental Hygiene;

(ii) Accredited by the Joint Commission; and

(iii) In compliance with the conditions of participation of the Medicare and Medicaid programs.

Applicants' response: UCMC complies with requirements issued by Maryland Department of Health (formerly the Department of Health and Mental Hygiene) for licensure, is accredited by the Joint Commission, and complies and will continue to comply with all conditions of participation in the Medicare and Medicaid programs. UCMC's license from the Maryland Department of Health, Office of Health Care Quality, most recent Joint Commission accreditation, most recent verifications of CMS 855a Medicare enrollment forms Novitas Solutions, the Medicare Administrative Contractor for Maryland, and verifications from the Maryland Department of Health Medicaid website are submitted herewith as **Exhibit 5**.

(b) A hospital with a measure value for a Quality Measure included in the most recent update of the Maryland Hospital Performance Evaluation Guide that falls within the bottom quartile of all hospitals' reported performance measured for that Quality Measure and also falls below a 90% level of compliance with the Quality Measure, shall document each action it is taking to improve performance for that Quality Measure.

Applicants' response: The Commission has recognized that "subpart (b) of [COMAR 10.24.10.04(A)(3)] is essentially obsolete in that it requires an improvement plan for any measure that falls within the bottom quartile of all hospitals' reported performance on that measure as reported in the most recent Maryland [Hospital Evaluation Performance Guide], which has been reengineered with a different focus, and no longer compiles percentile standings." *In re Dimensions Health Corporation*, Docket No. 13-16-2351, Decision at 19 (Sept. 30, 2016).

UCMC ranked "better than average" or "average" on fifty (50) of the seventy-two (72) quality measures. For an additional eleven (11) quality measures, UCMC did not have sufficient

data to report. UCMC ranked "below average" on only eleven (11) quality measures. **Table 2** below, identifies those quality measures for which UCMC was ranked "below average" along with UCMC's corrective action plan:

Table 2
Below-Average Quality Measures and Corrective Action

Quality Measure	Corrective Action Plan
COPD- Chronic Obstructive Pulmonary Disease	
Dying within 30-days after getting care in the hospital for chronic obstructive pulmonary disease (COPD).	As a part of UCMC's Patient and Family Centered Care Oversight Council, a multi-disciplinary COPD Workgroup has been created to focus on transitions of care. There are various scopes of work being implemented by the workgroup. The development of new pathway and order sets are in progress to reduce clinical variation in the COPD management. In addition, UCMC is working to increase patient education through video and pulmonary consults as needed.
Communication	
How often did doctors always communicate well with patients?	UCMC's Patient Experience Plan includes several strategies to improve physician communication including: language of caring education, direct observations of physician interactions with patients, and structured bedside rounding with physicians and nurses to communicate each patient's plan of care and to answer patient questions.
Were patients always given information about what to do during their recovery at home?	UCMC's Patient Experience Committee as well as the Transition of Care Committee work plans include revision of patient discharge educational materials and the implementation of a new interactive patient engagement system to include patient specific education plans, patient portal registration, and an extensive library of education videos.
Environment	
How often was patients' pain always well-	UM UCH's Pain Management Steering

Quality Measure	Corrective Action Plan
controlled?	Committee work plan includes several strategies for improving pain management including pain medication reassessment monitoring, RN education, designated pain management RN specialist and palliative care program. UCMC has also included pain assessment during hourly care rounds and shift hand-off communication.
How often was the area around patients' rooms always kept quiet at night?	UCMC is implementing several strategies to reduce noise including noise stoplights at nurses station to increase staff awareness of noise levels, reducing noise from delivery carts by changing cart wheels, reducing deliveries during night hours ,and implementing "quiet times" at designated times to promote uninterrupted rest.
Wait Times	
How long patients spent in the emergency department before being sent home? How long patients spent in the emergency department before they were seen by a healthcare professional?	In furtherance of UM UCH's fiscal year 2019 strategic objective for efficient care, a process improvement team has been charged to review Emergency Department ("ED") throughput and efficiency. Specifically, the work group will utilize the organization's IMPRV methodology to improve the ED's average length of stay and the times from "door to doctor." Executive oversight for this initiative will be driven through the Patient & Family Centered Care Oversight Committee and performance improvements will be monitored through a system-wide scorecard.
Heart Attack and Chest Pain	
Patients with heart attack who received aspirin on arrival to the hospital.	UCMC is actively developing a plan to ensure that all patients with heart attack receive aspirin on arrival to the hospital.

Quality Measure	Corrective Action Plan
Practice Patterns	
Patients who came to the hospital for a scan of their brain and also got a scan of their sinuses.	During FY18, three new CT scanners were installed within UCH (2 at UCMC and one at HMH). All three new scanners have the newest software and X-ray tube technology assuring low dose CT scans. A dose monitoring software, Radimetrics, was also purchased to monitor patient exposures during the CT scans allowing UCH to benchmark and watch for any outliers or trends with dose. During calendar year 2018, January through October measuring period, zero patients underwent CT of the sinus when ordered for a CT of the brain.
Results of Care - Death	
How often patients die in the hospital after bleeding from stomach or intestines.	All-cause mortality is an area of focus on UCMC's fiscal year 2019 Operating Plan. It also constitutes 15% of its Quality Based Reimbursement. A multidisciplinary project team has been deployed to determine both clinical interventions and documentation optimization to better understand the root causes driving any below average performance In addition, under the Safety domain, potentially preventable complications are being tracked, evaluated, and preventive efforts focused on opportunities for improvement.
How often patients die in the hospital after fractured hip.	UM UCH implemented a Geriatric Hip Fracture Program in April 2017. The primary focus of the program is to improve clinical care for acute hip fractures seen at UM UCMC and UM HMH. Following implementation of the program, there has been a decreases in average length of stay, time from admission to surgery, 30 day readmission rates, and 1 year all-cause mortality. In addition, the Geriatric Hip Fracture program has implemented a process to identify patients with an increased risk of a large bone fracture to provide preventative care coordination.

B. Project Review Standards.

(1) Geographic Accessibility.

A new acute care general hospital or an acute care general hospital being replaced on a new site shall be located to optimize accessibility in terms of travel time for its likely service area population. Optimal travel time for general medical/surgical, intensive/critical care and pediatric services shall be within 30 minutes under normal driving conditions for 90 percent of the population in its likely service area.

Applicants' response: This standard is inapplicable; the project does not involve a new acute general hospital or relocation of an acute general hospital.

(2) Identification of Bed Need and Addition of Beds.

Only medical/surgical/gynecological/addictions ("MSGA") beds and pediatric beds identified as needed and/or currently licensed shall be developed at acute care general hospitals.

(a) Minimum and maximum need for MSGA and pediatric beds are determined using the need projection methodologies in Regulation .05 of this Chapter.

(b) Projected need for trauma unit, intensive care unit, critical care unit, progressive care unit, and care for AIDS patients is included in the MSGA need projection.

(c) Additional MSGA or pediatric beds may be developed or put into operation only if:

(i) The proposed additional beds will not cause the total bed capacity of the hospital to exceed the most recent annual calculation of licensed bed capacity for the hospital made pursuant to Health-General §19-307.2; or

(ii) The proposed additional beds do not exceed the minimum jurisdictional bed need projection adopted by the Commission and calculated using the bed need projection methodology in Regulation .05 of this Chapter; or

(iii) The proposed additional beds exceed the minimum jurisdictional bed need projection but do not exceed the maximum jurisdictional bed need projection adopted by the Commission and calculated using the bed need projection methodology in Regulation .05 of this Chapter and the applicant can demonstrate need at the applicant hospital for bed capacity that exceeds the minimum jurisdictional bed need projection; or

(iv) The number of proposed additional MSGA or pediatric beds may be

derived through application of the projection methodology, assumptions, and targets contained in Regulation .05 of this Chapter, as applied to the service area of the hospital.

Applicants' response: Since filing its Modified Request for Exemption from CON Review on November 21, 2018 and based on discussions with Commission staff, UM UCH has revaluated the bed complement associated with the merger and consolidation of UCMC and HMH. UM UCH's clinical staff has considered implementation of clinical practices that could better align UM UCH's observation use rates with an identified peer group of hospitals. Through enhanced case management, utilization review, and triage evaluation processes, UM UCH estimates that it may be able to slightly reduce its observation utilization through either direct patient discharges or transitions of care to other outpatient departments or providers. UM UCH also estimates that through implementation of such clinical practices, approximately 34% of historic observation cases that lasted 24 or more hours will result in direct inpatient admissions from the emergency department at UCMC and from the proposed freestanding medical facility in Aberdeen. The planned changes to clinical protocols and process will be implemented beginning in January 2020 and require 18 months through the end of fiscal year 2021 to be fully implemented.

As described below, these changes in clinical observation practices and their impact on medical surgical admissions will move UCH's utilization of observation services in the direction of its hospital peer group and position UCH's utilization of inpatient medical surgical services to be comparable to that of its hospital peer group.

Observation Bed Need

1. UCMC Observation Cases

As reflected in **Table 3** below, the changes outlined above are projected to achieve a 5.1% reduction in the number of projected observation cases in fiscal year 2020 followed by an 11.2% reduction in fiscal year 2021. Included in these changes are an assumed 0.25% annual reduction in observation PAUs offset partially by 0.6% annual growth in population.

Table 3
UCMC's Historical and Projected Observation Cases
FY2015 – FY2024

	Historical				Projection						% Change
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY18-FY24
Observation Cases	**10,963**	**11,410**	**12,127**	**13,930**	**13,985**	**13,273**	**11,786**	**12,060**	**12,139**	**12,221**	
%Change		*4.1%*	*6.3%*	*14.9%*	*0.4%*	*-5.1%*	*-11.2%*	*2.3%*	*0.7%*	*0.7%*	*-12.3%*

In fiscal year 2022, with the shift of observation patients from HMH to UC FMF, it is expected that approximately 400 patients that stay greater than 48 hours at UC FMF will be transferred to UCMC. Approximately one-half of those transfers will become observation patients at UCMC. This addition results in a 2.3% increase in observation cases in fiscal year

2022 followed by population increases in fiscal years 2023 and 2024. Between fiscal year 2018 and 2024, the observation cases at UCMC are expected to decline by 12.3%

In comparing UCMC's actual utilization of observation cases per emergency department visit to that of its hospital peer group, UM UCH found that UCMC has an observation utilization ratio that is double that of its peer group average. *See* **Table 4** below. Applying the projected reduction in observation cases in fiscal year 2020 to UCMC's actual utilization of observation cases in fiscal year 2018 would reduce that ratio to be comparable to the hospitals identified in UCMC's hospital peer group.

Table 4
Comparison of Observation Cases per Emergency Department Visit
FY2018

	Observation Cases	Emergency Department Vists	OBV Cases per ED Visit
UCHS			
UM Upper Chesapeake Medical Center	13,930	60,928	0.23
UM Harford Memorial Hospital	4,443	26,743	0.17
UCHS Combined	18,373	87,671	0.21
Peer Group			
UM St. Joseph Medical Center	6,832	45,512	0.15
UM Baltimore Washington Medical Center	10,015	84,775	0.12
Carroll Hospital Center	5,541	48,024	0.12
MedStar Franklin Square	9,245	85,810	0.11
Howard County General Hospital	8,286	78,049	0.11
Peer Group Weighted Average			**0.12**
Impact of UCHS Achieving Targeted Reductions in Observation Utilization			
UCHS Reduction			
UM Upper Chesapeake Medical Center	(2,496)		
% Reduction	*-17.9%*		
UM Harford Memorial Hospital	(808)		
% Reduction	*-18.2%*		
UCHS Combined	(3,304)		
% Reduction	*-18.0%*		
Pro Forma Observation Cases			
UM Upper Chesapeake Medical Center	11,434	60,928	0.19
UM Harford Memorial Hospital	3,635	26,743	0.14
UCHS Combined	15,069	87,671	0.17

Source: FY2018 Annual Filing

2. UCMC Observation Average Length of Stay

In its reevaluation of observation bed utilization, UM UCH also determined that there is not a need to build bed capacity for hours associated with observation patients that are eventually

admitted. According to billing requirements for those patients that are eventually admitted, only those observation hours that occurred prior to 12:00 am of the day of admission can be billed. While these patients may be moved from an observation bed to an MSGA bed upon inpatient admission, UM UCH does not expect to construct additional observation beds to accommodate these patients prior to inpatient admission.

Per the HSCRC Experience Report dataset, UCMC reported 270,915 outpatient observation hours in fiscal year 2018. *See* **Table 5** below. During the twelve months ended August 2018, UCMC incurred 333,065 outpatient observation hours, an 18.7% increase over the hours billed during fiscal year 2018.

Table 5
UCMC's 2018 Outpatient Observation Utilization

	OP Observation Utilization
FY2018 HSCRC Experience Report	
Cases	8,817
Hours	270,915
UCHS Internal Report on Observation Hours (1)	
Cases	8,768
Hours	333,065
Unbilled Hours	62,150
Unbilled Hours % of HSCRC Reported Hours	18.7%

Note (1): Reflects UCHS internal Observation utilization for the 12 Months Ended August 2018

To reflect unbilled hours of observation stays based on billing regulations, the average length of stay of outpatient observation cases is projected to increase by the 18.7% as a result of timely clinical interventions to eliminate unbillable hours. This increase, however, is partially offset by an expected reduction in the number of observation cases greater than 24 hours beginning in fiscal year 2020 and then continuing into fiscal year 2021. Combined, the resulting average length of stay of all observation cases is projected to increase 15.2% from 0.99 days in fiscal year 2021 to 1.14 days in fiscal year 2020, but thereafter decline 9.6% to 1.03 days in fiscal year 2021 as observation cases greater than 24 hours continue to be reduced. *See* **Table 6** below. This average length of stay will then increase 2.9% in fiscal year 2022 to 1.06 days which takes into account the addition of observation cases with longer lengths of stay that will be transferred from the UC FMF beginning in fiscal year 2022.

Table 6
UCMC's Historical and Projected Observation ALOS
FY2015 – FY2024

	Historical				Projection						% Change
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY18-FY24
Observation ALOS	0.99	1.07	1.09	0.99	0.99	1.14	1.03	1.06	1.06	1.06	
%Change		*8.1%*	*1.9%*	*-9.2%*	*0.0%*	*15.2%*	*-9.6%*	*2.9%*	*0.0%*	*0.0%*	*7.1%*

3. UCMC Observation Bed Need

Multiplying the projected number observation cases by the projected average length of stay results in a projection of observation patient days. *See* **Table 7** below. In fiscal year 2020, the reduction in projected observation cases is offset by the increase in the average length of stay for an 8.5% increase in patient days. In fiscal year 2021, the reduction in observation cases is compounded by a reduction in the average length of stay for a 19.4% reduction in patient days. In fiscal year 2022, the increase in observation patients from the UC FMF combined with the increase in average length of stay results in a 5.4% increase in patient days. Observation patient days are then projected to grow with population increases in fiscal years 2023 and 2024. Offset partially by the population growth, patient days are projected to decline 6.3% from fiscal year 2018 to 2024.

Table 7
UCMC's Historical and Projected Observation Patient Days, ADC & Bed Need
FY2015 – FY2024

	Historical				Projection						% Change
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY18-FY24
Observation Pat Days	10,895	12,169	13,243	13,841	13,890	15,066	12,147	12,805	12,888	12,975	
%Change		*11.7%*	*8.8%*	*4.5%*	*0.3%*	*8.5%*	*-19.4%*	*5.4%*	*0.7%*	*0.7%*	*-6.3%*
Observation ADC	29.8	33.3	36.3	37.9	38.1	41.3	33.3	35.1	35.3	35.5	
%Change		*11.7%*	*8.8%*	*4.5%*	*0.3%*	*8.5%*	*-19.4%*	*5.4%*	*0.7%*	*0.7%*	*-6.3%*
Observation Bed Need	38	42	46	48	48	52	42	44	45	45	
%Change		*10.5%*	*9.5%*	*4.3%*	*0.0%*	*8.3%*	*-19.2%*	*4.8%*	*2.3%*	*0.0%*	*-6.3%*

Dividing the projected patient days by 365 days a year results in an average daily census (ADC) of 35.5 patients in fiscal year 2024. The Applicants used the State Health Plan occupancy rate of 80% to project the number of observation beds at UCMC. Based on the assumptions presented above, there is a projected need for 45 observation beds at UCMC in fiscal year 2024 to accommodate the projected number of observation patients. *See* **Table 7** above. This bed need projection in fiscal year 2024 represents a 6.3% decrease from UCMC's actual observation bed need of 48 beds in fiscal year 2018. The proposed project is to create a dedicated observation unit with 42 semi-private rooms.

MSGA Bed Need

The implementation of clinical processes and protocols to convert 34% of historic observation cases to inpatient status will increase UCMC's projected need for MSGA beds. As described in more detail below, the conversion of these observation cases to inpatient status, as well as an update for fiscal year 2019 actual inpatient medical surgical utilization will increase UCMC's MSGA projected bed need to 213 beds by fiscal year 2024, including one pediatric bed. This bed need is comprised of 195 general MSGA beds, and 17 intensive care ("ICU") beds, and one pediatric bed.

As reflected in **Table 8**, UCMC's projected need for 212 MSGA beds falls within the MHCC's published bed need projection of 168 to 223 MSGA beds for Harford County in 2025 (Maryland Register Vol. 44, Issue 2, pp. 160-162, dated January 20, 2017).

Table 8
MHCC's MSGA Bed Need Projection by Jurisdiction
2025

Gross and Current Bed Need Projections for MSGA Beds - Maryland, 2025

Jurisdiction	Gross Bed Need		Licensed and Approved Beds	2025 Net Bed Need	
	Minimum	Maximum		Minimum	Maximum
Harford	168	223	218	-50	5

The Applicants used the following methodology and assumptions to project the need for these beds at UCMC.

1. <u>UCMC / HMH MSGA Service Area Use Rates</u>

The conversion of observation cases to inpatient admissions will increase inpatient admissions at both UCMC and in the combined UCMC and HMH MSGA service area. Based on the shift of observation cases to inpatient admissions as described in the UCMC Observation Bed Need section above, the total inpatient service area use rate is expected to increase 4.3% in fiscal year 2020 followed by a 7.0% increase in fiscal year 2021 and a 2.2% increase in fiscal year 2022. *See* **Table 9** below.

Table 9
UCMC / HMH Historical and Projected MSGA Use Rate
FY2015 - FY2024

	Historical				Projection						% Change
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY18-FY24
MSGA Use Rates											
Age 0-14	**13.7**	**13.6**	**13.5**	**13.1**	**13.1**	**13.1**	**13.1**	**13.1**	**13.1**	**13.1**	
%Change	*-19.3%*	*-1.2%*	*-0.1%*	*-3.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Age 15-64	**51.4**	**51.9**	**51.9**	**49.2**	**49.2**	**50.5**	**52.9**	**53.3**	**53.3**	**53.3**	
%Change	*-10.9%*	*1.0%*	*0.0%*	*-5.1%*	*0.0%*	*2.5%*	*4.9%*	*0.7%*	*0.0%*	*0.0%*	*8.3%*
Age 65-74	**188.3**	**183.6**	**182.7**	**172.0**	**172.0**	**176.8**	**186.2**	**187.7**	**187.7**	**187.7**	
%Change	*-6.7%*	*-2.5%*	*-0.5%*	*-5.9%*	*0.0%*	*2.8%*	*5.3%*	*0.8%*	*0.0%*	*0.0%*	*9.1%*
Age 75+	**358.6**	**350.5**	**336.1**	**312.1**	**312.1**	**323.7**	**346.6**	**350.1**	**350.1**	**350.1**	
%Change	*-4.0%*	*-2.3%*	*-4.1%*	*-7.2%*	*0.0%*	*3.7%*	*7.1%*	*1.0%*	*0.0%*	*0.0%*	*12.2%*
Total	**74.9**	**75.3**	**75.4**	**72.0**	**72.9**	**76.1**	**81.4**	**83.2**	**84.3**	**85.5**	
	-7.3%	*0.5%*	*0.1%*	*-4.5%*	*1.4%*	*4.3%*	*7.0%*	*2.2%*	*1.4%*	*1.4%*	*18.9%*

Prior to and after the conversion of observation cases to inpatient admissions, UCMC expects that use rates will remain constant at the age cohort level. Due to the aging of the population to age cohorts with higher use rates, the aggregate use rate is expected to increase by 1.4% in fiscal year 2019 and in fiscal years 2023 and 2024. Combined, the aggregate use rate is expected to increase 18.9% from fiscal year 2018 to 2024, driven predominantly by the conversion of observation cases to inpatient admissions. *See* **Table 9** above.

2. UCMC / HMH MSGA Service Area Discharges

With 0.6% to 0.7% annual population growth and increases in use rates, the total projected MSGA service area discharges are projected to increase 23.3% between fiscal year 2018 and fiscal year 2024 as shown in **Table 10** below.

Table 10
UCMC / HMH Historical and Projected MSGA Service Area Discharges
FY2015 - FY2024

	Historical				Projection						% Change
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY18-FY24
Service Area Discharges	**18,879**	**19,071**	**19,183**	**18,410**	**18,764**	**19,679**	**21,174**	**21,779**	**22,233**	**22,703**	
%Change	*-6.8%*	*1.0%*	*0.6%*	*-4.0%*	*1.9%*	*4.9%*	*7.6%*	*2.9%*	*2.1%*	*2.1%*	*23.3%*

3. UCMC MSGA Market Share

When HMH is projected to convert to UC FMF and cease inpatient services in fiscal year 2022, its acute inpatient services will shift to other local providers based on a drive time analysis that was conducted by service line. The applicants anticipate that all of HMH's surgical cases will be retained within UM UCH for the following reasons: (1) community medical staff referral patterns are not anticipated to change based upon change in facility location; (2) all surgical providers currently operating at HMH have privileges at UCMC; and (3) surgical providers currently performing cases at HMH have expressed the intent to move such cases to UCMC. A

majority of the operating surgical providers at HMH are employed by UM UCH and, therefore, the shift of surgical practice locations to other hospitals is not anticipated. In addition, UM UCH and the applicants are not anticipating a change in the primary care provider base other than the primary care recruitment that UM UCH is leading in conjunction with community and employed primary care providers.

As a result of the foregoing reasons, the applicant projects that 74.4% of HMH's acute medical and surgical cases will shift to UCMC and 25.6% will shift to other facilities. *See* **Table 11** below. A more detailed calculation of the HMH inpatient discharges that will be shifted to UCMC and Union Hospital of Cecil County is provided in **Exhibit 6**.

Table 11
Shift of HMH MSGA Discharges
FY2022

HMH MSGA Discharges	Projected FY2022	% of HMH Discharges
Medical Discharges	3,389	86.2%
Surgical Discharges	542	13.8%
HMH MSGA Discharges	3,931	100.0%
Transfer to UCMC	(2,923)	-74.4%
Transfer to UHCC	(859)	-21.8%
Transfer to Other Hospitals	(149)	-3.8%
Transfer of HMH MSGA Discharges	(3,931)	-100.0%

UCMC's MSGA market share of 44.2% in fiscal year 2017 is the same as was experienced in fiscal year 2015. *See* **Table 12** below. UCMC did experience a reduction in service area market share in fscal year 2018 associated with the reduction in PAUs and a shift of inpatient services to the outpatient setting. Based on actual utilization in fiscal year 2019, UCMC estimates that its market share increased 3.3%. In fiscal year 2020, UCMC's market share is projected to increase 3.9% as UCMC captures all of the observation cases at UCMC that are converted to service area inpatient admissions if fiscal year 2021, UCMC's market share is projected by 6.7%. In fiscal year 2022, UCMC's MSGA market share is projected to increase 25.1% with the shift of cases from HMH and admission of observation patients transferred from the UC FMF. In fiscal years 2023 and 2024, UCMC's market share is expected to remain constant at the age cohort level, but increase slightly each year, in aggregate, with the aging of the population into age cohorts with greater market share. Combined, UCMC's market share is projected to increase by 43.9% from fiscal year 2018 to 2024. *See* **Table 12** below.

Table 12
UCMC's Historical and Projected MSGA Market Share
FY2015 - FY2024

	Historical				Projection						% Change
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY18-FY24
UCMC Market Share	**44.2%**	**44.9%**	**44.2%**	**41.7%**	**43.1%**	**44.8%**	**47.7%**	**59.7%**	**59.8%**	**60.0%**	
%Change	*-2.0%*	*1.4%*	*-1.5%*	*-5.7%*	*3.3%*	*3.9%*	*6.7%*	*25.1%*	*0.2%*	*0.2%*	*43.9%*

4. UCMC Out-of-Service Area MSGA Discharges

UCMC's out-of-service area MSGA discharges are projected to equal 17.4% of its in-service area discharges as experienced in fiscal year 2017. *See* **Table 13** below.

Table 13
UCMC's Historical and Projected Out-of-Service Area MSGA Discharges
% of Service Area Discharges
FY2015 – FY2024

	Historical				Projection					
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Out-of-Service Area Discharges										
% of Service Area Discharges	16.0%	16.8%	17.4%	17.4%	17.4%	17.4%	17.4%	17.4%	17.4%	17.4%

5. UCMC Inpatient MSGA Discharges

Based on the assumptions described above, UCMC's MSGA discharges are projected to increase from fiscal year 2018 to fiscal year 2024 by 77.3. **Table 14**. This growth is driven by (1) a 5.3% increase in actual MSGA utilization in fiscal year 2019, (2) a combined 23.7% increase in fiscal years 2020 and 2021 related to the conversion of observation cases to inpatient admissions, (3) a 28.6% increase in fiscal year 2022 related to the shift of inpatient admissions from HMH, and (4) aging of the population into age cohorts with higher use rates and market share.

Table 14
UCMC's Historical and Projected Inpatient MSGA Discharges
FY2015 – FY2024

	Historical				Projection						% Change
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY18-FY24
IP Discharges	**9,682**	**9,990**	**9,957**	**9,011**	**9,490**	**10,341**	**11,863**	**15,254**	**15,607**	**15,972**	
%Change		*3.2%*	*-0.3%*	*-9.5%*	*5.3%*	*9.0%*	*14.7%*	*28.6%*	*2.3%*	*2.3%*	*77.3%*

In comparing UCMC's actual utilization of inpatient medical surgical discharges per emergency department visit to that of its hospital peer group, UM UCH found that UCMC has an inpatient medical surgical utilization ratio that is less than that of its peer group average. See **Table 15** below. This lower than peer group average for inpatient medical surgical utilization is partly driven by the greater than peer group average for observation services. Applying the

projected conversion of observation cases to inpatient admissions in fiscal year 2020, as well as an update for fiscal year 2019 associated actual utilization, UCMC's actual utilization of inpatient MSGA discharges in fiscal year 2018 would increase UCMC's ratio to equal the peer group average.

Table 15
Comparison of MedSurg Discharges per Emergency Department Visit
FY2018

	MedSurg Discharges	Emergency Department Vists	MedSurg Discharges per ED Visit
UCHS			
UM Upper Chesapeake Medical Center	10,311	60,928	0.17
UM Harford Memorial Hospital	3,196	26,743	0.12
UCHS Combined	13,507	87,671	0.15
Peer Group			
UM St. Joseph Medical Center	14,288	45,512	0.31
Howard County General Hospital	19,065	78,049	0.24
Carroll Hospital Center	9,427	48,024	0.20
UM Baltimore Washington Medical Center	14,971	84,775	0.18
MedStar Franklin Square	13,533	85,810	0.16
Peer Group Weighted Average			**0.22**
Impact of UCHS Achieving Targeted Conversion of Observation Cases to Inpatient Admissions and Updating for FY2019 MedSurg Utilization			
UCHS Change			
UM Upper Chesapeake Medical Center	2,680		
% Reduction	*26.0%*		
UM Harford Memorial Hospital	-		
% Reduction	*0.0%*		
UCHS Combined	2,680		
% Reduction	*19.8%*		
Pro Forma Observation Cases			
UM Upper Chesapeake Medical Center	12,991	60,928	0.21
UM Harford Memorial Hospital	3,196	26,743	0.12
UCHS Combined	16,187	87,671	0.18

Source: FY2018 Annual Filing

6. UCMC MSGA Average Length of Stay (ALOS)

The average length of stay for MSGA patients at UCMC increased 3.4% from fiscal year 2018 to fiscal year 2019 based UCMC's actual experience. Between fiscal years 2020 and 2022, the average length of stay is expected to decline to 2.5%, 4.3%, and 0.3%, respectively, as the observation cases that are converted to inpatient admissions are expected to stay 2.4 days on average. The average length of stay is then expected to increase 0.1% a year in fiscal years 2023

and 2024 with the aging of the population into age cohorts with higher average lengths of stay *See* **Table 16** below.

Table 16
UCMC's Historical and Projected ALOS
FY2015 – FY2024

	Historical				Projection						% Change
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY18-FY24
ALOS - MSGA	**4.41**	**4.13**	**3.99**	**4.03**	**4.17**	**4.07**	**3.89**	**3.88**	**3.88**	**3.89**	
%Change		*-6.5%*	*-3.4%*	*1.2%*	*3.4%*	*-2.5%*	*-4.3%*	*-0.3%*	*0.1%*	*0.1%*	*-2.5%*

7. UCMC MSGA Bed Need

Multiplying the project number of of MSGA discharges by the projected average length of stay results in a projection of MSGA patient days. In fiscal year 2019, actual patient days were 8.9% higher than fiscal year 2018. In fiscal years 2020 and 2021, the increases in admissions related to the conversion of observation cases are partially offset by a reduction in average length of stay resulting in 6.3% and 9.8% increases in patient days. In fiscal year 2022, the increase in admissions will be partially offset by a reduction in the ALOS for a net 28.1% increase in patient days. Along with population growth and the shift of inpatient admissions from HMH, patient days are projected to increase 70.8% between fiscal year 2018 and 2024. *See* **Table 17** below.

Table 17
UCMC's Historical and Projected MSGA Patient Days, ADC & Bed Need
FY2015 – FY2024

	Historical				Projection						% Change
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY18-FY24
Patient Days	**42,738**	**41,221**	**39,682**	**36,352**	**39,578**	**42,039**	**46,154**	**59,151**	**60,586**	**62,072**	
%Change		*-3.5%*	*-3.7%*	*-8.4%*	*8.9%*	*6.2%*	*9.8%*	*28.2%*	*2.4%*	*2.5%*	*70.8%*
Average Daily Census	**117**	**113**	**109**	**100**	**108**	**115**	**126**	**162**	**166**	**170**	
%Change		*-3.5%*	*-3.7%*	*-8.4%*	*8.9%*	*6.2%*	*9.8%*	*28.2%*	*2.4%*	*2.5%*	*70.8%*
MSGA Bed Need	**146**	**141**	**136**	**125**	**136**	**144**	**158**	**203**	**208**	**213**	
%Change		*-3.6%*	*-3.8%*	*-8.4%*	*8.8%*	*6.3%*	*9.8%*	*28.1%*	*2.4%*	*2.5%*	*70.8%*

Dividing the projected patient days by 365 days results in an average daily census (ADC) of 170 patients in fiscal year 2024. The applicants then used the State Health Plan occupancy rate of 80% for hospitals with an average daily census of 100-299 patients to project the number of MSGA beds at UCMC. Based on the assumptions presented above, there is a projected need for 212 MSGA beds at UCMC in fiscal year 2024 to accommodate the projected number of MSGA patients. *See* **Table 17** above. In addition, there is a need for one (1) pediatric bed.

Based on UCMC's allocation of MSGA patient days in fiscal year 2018 and recognition that the converted observation cases will utilize general adult MSGA beds, the fiscal year 2024

projected 212 MSGA beds at UCMC are split between 195 general MSGA, and 17 ICU beds. In addition, and 1 Pediatric bed as described in **Table 18**.

Table 18
UCMC's Historical and Projected MSGA Bed Need
FY2015 – FY2024

	Historical				Projection						% Change
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY18-FY24
MSGA Bed Need											
General MSGA	**131**	**126**	**121**	**110**	**121**	**140**	**143**	**185**	**190**	**195**	*78.2%*
ICU/CCU	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**17**	**17**	**17**	*21.4%*
Pediatric	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	*0.0%*
Total	**146**	**141**	**136**	**125**	**136**	**155**	**158**	**203**	**208**	**213**	*71.2%*
%Change		*-3.6%*	*-3.8%*	*-8.4%*	*8.8%*	*14.0%*	*2.5%*	*28.2%*	*2.4%*	*2.5%*	

(3) Minimum Average Daily Census for Establishment of a Pediatric Unit.

An acute care general hospital may establish a new pediatric service only if the projected average daily census of pediatric patients to be served by the hospital is at least five patients, unless:

(a) The hospital is located more than 30 minutes travel time under normal driving conditions from a hospital with a pediatric unit; or

(b) The hospital is the sole provider of acute care general hospital services in its jurisdiction.

Applicants' response: This standard is inapplicable; the proposed project does not seek to establish a new pediatric service.

(4) Adverse Impact.

A capital project undertaken by a hospital shall not have an unwarranted adverse impact on hospital charges, availability of services, or access to services. The Commission will grant a Certificate of Need only if the hospital documents the following:

(a) If the hospital is seeking an increase in rates from the Health Services Cost Review Commission to account for the increase in capital costs associated with the proposed project and the hospital has a fully-adjusted Charge Per Case that exceeds the fully adjusted average Charge Per Case for its peer group, the hospital must document that its Debt to Capitalization ratio is below the average ratio for its peer group. In addition, if the project involves replacement of physical plant assets, the hospital must document that the age of the physical plant assets being replaced exceed the Average Age of Plant for its peer group or otherwise demonstrate why the physical plant assets require replacement in order to achieve the primary

objectives of the project; and

Applicants' response: This standard is inapplicable. The Applicants are presently not seeking a rate increase from the HSCRC.

(b) If the project reduces the potential availability or accessibility of a facility or service by eliminating, downsizing, or otherwise modifying a facility or service, the applicant shall document that each proposed change will not inappropriately diminish, for the population in the primary service area, the availability or accessibility to care, including access for the indigent and/or uninsured.

Applicants' response: This standard is inapplicable to the proposed project.

(5) Cost-Effectiveness.

A proposed hospital capital project should represent the most cost effective approach to meeting the needs that the project seeks to address.

(a) To demonstrate cost effectiveness, an applicant shall identify each primary objective of its proposed project and shall identify at least two alternative approaches that it considered for achieving these primary objectives. For each approach, the hospital must:

(i) To the extent possible, quantify the level of effectiveness of each alternative in achieving each primary objective;

(ii) Detail the capital and operational cost estimates and projections developed by the hospital for each alternative; and

(iii) Explain the basis for choosing the proposed project and rejecting alternative approaches to achieving the project's objectives.

Applicants' response: Before deciding on the proposed project, in 2015 UCMC engaged architectural and construction consultants HKS and Whiting-Turner to evaluate and various options to expand inpatient capacity on its campus. A summary of evaluation is provided below and set forth in **Exhibit 7**. Ultimately, the proposed project was determined to be the most cost-effective alternative.

Option One – A Two Floor Vertical Expansion of the Cancer Center

The Kaufman Cancer Center was designed for 3 stories of vertical expansion. The floorplate (26,000 BGSF) is capable of supporting up to 42 semi-patient observation rooms on one floor with private en suite toilet/shower rooms, and 30 private inpatient rooms..

Essential components of this option include replacing 2 existing chillers, 3 existing cooling towers and 2 existing boilers with larger units, replacing the existing fire pump, and a

new emergency power feeder from the central plant as well as renovations to include a Fire Command Center to accommodate the new designation as a high-rise building.

The Kaufman Cancer Center, moreover, is the most recent addition to the UCMC campus and is most likely to meet current seismic codes. It was also planned to become a high-rise and, therefore, the conversion accommodations are already in place. Structural stub-ups exist and rooftop mechanical equipment is disposable and was planned to be replaced.

1A. The Proposed Project - Option One-A – A Three Floor Vertical Expansion of the Cancer Center

Option 1.A., the proposed project, included a 3-story expansion above the Kaufman Cancer Center, with one floor constructed as shell space in addition to the patient rooms described in Option 1 above. As described in response to COMAR 10.04.10.04B(16) below, the proposed shell space on this floor will support accommodate growth for the Kaufman Cancer Center's diagnostic and treatment services within the next three years. Expansion of the Kaufman Cancer Center is currently incorporated into UM UCH's approved strategic capital plan.

Option Two - Renovation of Levels 3 and 4 of the Ambulatory Care Center (ACC)

The Ambulatory Care Center ("ACC") was built in 1998 and was not designed for vertical expansion, but is connected to the main hospital and has a floorplate (24,000 BGSF) capable of supporting up to 30 single-patient rooms with private en-suite toilet/shower rooms (approximately 300 square feet each). A two-level renovation project would provide up to 60 private patient rooms. Additional floors could be renovated in the future if additional beds are needed.

Essential components of this alternative include construction of a new medical office building ("MOB") to accommodate the existing tenants on the 3rd and 4th floors of the ACC, conversion of plenum air return system to ducted system, new sanitary risers, new medical gas risers, and new emergency power feeder from the central plant.

Additional potential (recommended) components of this option include renovations to the existing structure to provide a second patient/service elevator and relocation of an electrical/data room to maximize the number of inpatient rooms.

Option Three - One floor vertical expansion of the Main Hospital towers and the ED/bed tower addition to the east

UCMC's main hospital bed towers were constructed in 1998 and the emergency department/bed tower addition, constructed in 2005, were each designed for one story of vertical expansion and the floorplate of the two combined, 47,000 building gross square feet, is capable of supporting up to 60 single-patient rooms with private en suite toilet/shower rooms (approximately 250 square feet each).

Essential components of this option include relocation of 3 penthouses, structural re-analysis for seismic compliance with current building codes, phased construction (including

temporary air handling units with resulting increases in construction duration), replacing 1 chiller and 2 cooling towers with larger units, replacing the existing fire pump to meet the high-rise code, a new emergency power feeder from the central plant, and replacement of all rooftop fans, lightning protection, etc.

Option Four - One floor vertical expansion of main hospital bed towers

The main hospital bed towers constructed in 1998 were designed for one story of vertical expansion and have a 38,000 building gross square foot floorplate capable of supporting up to 44 single-patient rooms with private en suite toilet/shower rooms (approximately 250 square feet each).

Essential components of this alternative include relocation of 3 penthouses, structural re-analysis for seismic compliance with current building codes, phased construction (including temporary air handling units with resulting increases in construction duration), replacing 1 chiller and 2 cooling towers with larger units, replacing the existing fire pump to meet the high-rise code, new emergency power feeder from the central plant, and replacement of all rooftop fans, lightning protection, etc.

Option Five - One floor vertical expansion of the main hospital diagnostic and treatment core.

UCMC's main hospital diagnostic and treatment core was built in 1998 and designed for one story of vertical expansion. It has a floorplate for expansion of 24,600 building gross square feet and is capable of supporting up to 30 single-patient rooms with private en-suite toilet/shower rooms (approximately 300 square feet each).

Essential components of this alternative include renovation of existing Level 1 space to provide two new stairs, relocation of surgical air handler and MRI chillers, structural re-analysis for seismic compliance with current building codes, new sanitary piping in ceilings of surgery suite, removal and relocation of three existing air handling units, phased construction (including temporary air handling units with resulting increases in construction duration), replacing one chiller and two cooling towers with larger units, new emergency power feeder from the central plant, and replacement of all rooftop fans, lightning protection, etc.

Analysis of Options

Upon review of the costs and benefits of the available options, Option 1A provides the most viable and cost-effective solution. Option 1A provides the optimal number of beds to meet the projected need – seventy-seven total observation beds– at the optimal patient room size and at the lowest cost per bed. Option 1A also provides efficient and effective flexibility for future expansion of either inpatient needs or oncology diagnostic and treatment services. In addition to the benefits listed above, Option 1A provides adequate space to expand a number of the semi-private rooms to serve as semi-private observation rooms in a manner that is cost effective, space efficient, and focused on patient and staff safety.

Table 19 below summarizes the costs associated with each option. The construction costs have been updated for inflation since the 2015 study.

Table 19
Cost Summary of Alternatives Considered

	Option 1 Cancer Center	Option 1A (Add Alternate) Cancer Center	Option 2 ACC	Option 3 Main Hospital	Option 4 Main Hospital Core	Option 5 Above D & T	Optimal [1]
BGSF (sf)	52,000	26,000	48,000	47,000	35,000	24,600	
DGSF (sf)	43,300	21,650	40,000	39,200	29,200	23,300	
# of Floors	2	1	2	1	1	1	
# of Beds	60	30 (potential)	54 - 60	60	40 - 44	30	60
Room size (sf)	300	N/A	300	250	250	300	290-350
DGSF/Bed (sf)	722	N/A	742 - 667	653	730 - 664	777	650 [1]
Est. Cost per Bed ($)	429, 628	+69,340 (60)	541,816 [2] (57)	627,657	693,319 (40)	700,693	
Estimated Cost ($M)	25.8	4.2	30.9 [2]	37.7	27.7	21	
Estimated Cost 2019 ($M)	31.8	5.2	38.1	46.5	34.1	25.9	
Increase Since 3rd Qtr 2015 ($M)	**6.0**	**1.0**	**7.2**	**8.8**	**6.4**	**4.9**	

(b) An applicant proposing a project involving limited objectives, including, but not limited to, the introduction of a new single service, the expansion of capacity for a single service, or a project limited to renovation of an existing facility for purposes of modernization, may address the cost-effectiveness of the project without undertaking the analysis outlined in (a) above, by demonstrating that there is only one practical approach to achieving the project's objectives.

Applicants' response: *See* the Applicants' response to 10.24.10.04B(5)(a) above.

(c) An applicant proposing establishment of a new hospital or relocation of an existing hospital to a new site that is not within a Priority Funding Area as defined under Title 5, Subtitle 7B of the State Finance and Procurement Article of the Annotated Code of Maryland shall demonstrate:

(i) That it has considered, at a minimum, an alternative project site located within a Priority Funding Area that provides the most optimal geographic accessibility to the population in its likely service area, as defined in Project Review Standard (1);

(ii) That it has quantified, to the extent possible, the level of effectiveness, in terms of achieving primary project objectives, of implementing the proposed project at each alternative project site and at the proposed project

site;

(iii) That it has detailed the capital and operational costs associated with implementing the project at each alternative project site and at the proposed project site, with a full accounting of the cost associated with transportation system and other public utility infrastructure costs; and

(iv) That the proposed project site is superior, in terms of cost-effectiveness, to the alternative project site or sites located within a Priority Funding Area.

Applicants' response: This standard is inapplicable; the project does not involve establishment of a new hospital or relocation of an existing hospital.

(6) Burden of Proof Regarding Need.

A hospital project shall be approved only if there is demonstrable need. The burden of demonstrating need for a service not covered by Regulation .05 of this Chapter or by another chapter of the State Health Plan, including a service for which need is not separately projected, rests with the applicant.

Applicants' response: The Applicants have demonstrated need to construct 30 MSGA beds and 42 observation beds upon the merger and consolidation of UCMC and HMH. *See* the Applicants' response to 10.24.10.04B(2) above.

(7) Construction Cost of Hospital Space.

The proposed cost of a hospital construction project shall be reasonable and consistent with current industry cost experience in Maryland. The projected cost per square foot of a hospital construction project or renovation project shall be compared to the benchmark cost of good quality Class A hospital construction given in the Marshall Valuation Service® guide, updated using Marshall Valuation Service® update multipliers, and adjusted as shown in the Marshall Valuation Service® guide as necessary for site terrain, number of building levels, geographic locality, and other listed factors. 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.

Applicants' response: The following compares the project costs to the Marshall Valuation Service ("MVS") benchmark.

I. Marshall Valuation Service
Valuation Benchmark

Type		Hospital
Construction Quality/Class		Good/A
Stories		6
Perimeter		492
Average Floor to Floor Height		16.8
Square Feet		88,850
f.1	Average floor Area	14,808
A. Base Costs		
	Basic Structure	$374.00
	Elimination of HVAC cost for adjustment	0
	HVAC Add-on for Mild Climate	0
	HVAC Add-on for Extreme Climate	0
Total Base Cost		$374.00
Adjustment for Departmental Differential Cost Factors		0.91
Adjusted Total Base Cost		$339.32
B. Additions		
	Elevator (If not in base)	$0.00
	Other	$0.00
Subtotal		$0.00
Total		$339.32
C. Multipliers		
Perimeter Multiplier		0.931774667
	Product	$316.17
Height Multiplier		1.11
	Product	$351.00
Multi-story Multiplier		1.010
	Product	$354.51

D. Sprinklers		
	Sprinkler Amount	$3.08
Subtotal		$357.59
E. Update/Location Multipliers		
Update Multiplier		1.08
	Product	$386.20
Location Multipier		1
	Product	$386.20
Calculated Square Foot Cost Standard		**$386.20**

The MVS estimate for this project is impacted by the Adjustment for Departmental Differential Cost Factor. In Section 87 on page 8 of the Valuation Service, MVS provides the cost differential by department compared to the average cost for an entire hospital. The calculation of the average factor is shown below.

Department/Function	BGSF	MVS Department Name	MVS Differential Cost Factor	Cost Factor X SF
ACUTE PATIENT CARE				
Med / Surg Patient Unit Level 5	26,290	Inpatient Unit	1.06	27,867
Observation Unit Level 4	26,290	Inpatient Unit	1.06	27,867
Food Service & EVS Expansion	8,960	Service Department	1.2	10,752
Shell Space Level 3	26,290	Unassigned Space	0.5	13,145
Existing Cancer Center	1,020	Outpatient Department	0.96	979
TOTAL	88,850		0.90727068	80,611

Cost of New Construction

A. Base Calculations	Actual	Per Sq. Foot
Building	$35,946,047	$404.57
Fixed Equipment	$0	$0.00
Site Preparation	$246,346	$2.77
Architectual Fees	$4,628,765	$52.10
Permits	$2,320,586	$26.12
Capitalized Construction Interest	Calculated Below	Calculated Below
Subtotal	$43,141,744	$485.56

However, as related below, this project includes expenditures for items not included in the MVS average.

	Project Costs		Associated Cap Interest & Financing
Complexity Premium	$3,594,605	Building	$719,274
Demolition	$1,085,820	Building	$217,270
2/5 HVAC System	$3,055,552	Building	$611,410
OVHD Bridges	$2,535,000	Building	$507,249
Pneumatic tube	$466,440	Building	$93,334
Signage	$132,454	Building	$26,504
Elevator Premium	$873,950	Building	$174,876
Premium for Minority Business Enterprise Requirement	$1,437,842	Building	$287,709
Premium for Minority Business Enterprise Requirement	$9,854	Site	
Total Cost Adjustments	$13,191,516		$2,637,626

Associated Capitalized Interest and Loan Placement Fees should be excluded from the comparison for those items which are also excluded from the comparison. Since only Capitalized Interest and Loan Placement fees relating to the Building costs are included in the MVS analysis, we have only eliminated them for the Extraordinary Costs that are in the Building cost item. This was calculated as follows, using Signage as an example:

(Cost of Signage/Building Cost) X (Building related Capitalized Interest and Loan Placement Fees).

Explanation of Extraordinary Costs

Below are the explanations of the Extraordinary Costs that are not specifically mentioned as not being in contained in the MVS average costs in the MVS Guide (at Section 1, Page 3) but that are specific to this project and would not be in the average cost of a hospital project.

1. Complexity Premium - The complexity and necessary logistics of the project has a profound impact on the cost of construction. The project is bordered by a major road artery within 30 feet of the building footprint on the west, a road artery within 50 feet of the south elevation which is also the sole access point to the building's parking garage. On the north elevation, there is a direct attachment to the hospital and no setback from the main and sole loading dock and Central Utility Plant on the east elevation. These constraints require extraordinary methods of construction, safety, access for patients, guests and employees that will

ultimately reduce construction productivity. The limited access requires a specialized tower crane that will be interior to the existing building, extreme measures to provide safe access of patients, guests and employee in to and around the building site. The limited area around the building requires off-site staging and material storage which add logistic costs from the remote staging area and scheduling demands for delivery of materials to the construction site. The tower crane as the sole source of delivery of materials into the project along with an exterior elevator system for construction staff to reach the upper floors limit material and manpower into and out of the construction floors 3, 4 and 5.

The construction activity will occur immediately above the Cancer Center and immediately adjacent to the Main Hospital, specifically three (3) floors of in-patient rooms to the east and two floors of outpatient Cancer patients directly below the construction site. These constraints require additional consideration for noise, safety and the general need to maintain ongoing operations and respect our patient experience.

2. 2/5 HVAC System - With the elimination of the existing rooftop units new services must now be provided by the Central Utility Plant (CUP) and on the roof of the new expansion for the existing two floors plus the additional three floors. The combined total demand required for this five (5) story building requires relocation of existing chillers to accommodate the installation of new two (2) chillers, replacement of the existing Cooling Tower which is not expandable to meet the current demand, replacement of one (1) boiler of our existing three (3) boilers to provide the required redundancy, the replacement of the existing fire pump and an increase in the sprinkler supply lines for the additional water flow requirements and finally the addition of a Fire Command Center because the addition of the three floors classifies the building as “High Rise”. In essence, we are providing new mechanical systems for 2/5 of the ultimate build-out of the five story building and additional support services required by the NFPA.

3. OVHD Bridges - This expansion requires the construction of two enclosed access bridges to the main hospital that will connect on existing Main Hospital patient floors two and three. These connections require modifications to the main hospital at the connection points. For efficiency, the design contemplates shared structural components gained with a stacked design. Adding to the complex logistics of this project, this connector bridge construction will occur adjacent to occupied patient units and above the busy hospital loading dock.

4. Pneumatic tube - The hospitals existing pneumatic tube system will be extended to the new facility and will utilize the bridge connection to connect to the new floors.

5. Elevator Premium - The construction of new elevator systems and the extension of the existing elevator shafts to the new floors will impact patient access and will require overnight construction activity so as not to impact the Cancer Center outpatient experience during normal business hours. Only the premium over the anticipated MVS cost is included as an Extraordinary Cost. This was calculated as follows:

Elevator Cost in Budget			$1,234,038
MVS Costs			
$106,000	per Elevator	2 Elevators	$212,000
$8,600	per Stop	16 Stops	$137,600
	Subtotal:		$349,600
	Location Multplier		1
			$349,600
	Update Multiplier		1.08
	Final MVS Cost		$360,088
Premium			$873,950

6. Premium for Minority Business Enterprise Requirement – UMMS projects include a premium for Minority Business Enterprises that would not be in the average cost of hospital construction. This premium was conservatively projected to be 4%. UMMS consulted with its cost estimators/construction managers on the impact on project budgets of targeting 25% inclusion of MBE subcontractors or suppliers as part of its projects, and their conservative estimate is that it adds 3-4% to the costs, compared to projects that do not include MBE subcontractors or suppliers. This estimate has been confirmed through UMMS' experience with past construction jobs. UMMS now uses this percentage in all of its construction cost estimates.

Eliminating all of the extraordinary costs reduces the project costs that should be compared to the MVS benchmark.

C. Adjusted Project Cost		**Per Square Foot**
Building	$22,764,385	$256.21
Fixed Equipment	$0	$0.00
Site Preparation	$236,492	$2.66
Architectural Fees	$4,628,765	$52.10
Permits	$2,320,586	$26.12
Subtotal	$29,950,228	$337.09
Capitalized Construction Interest	$3,355,420	$34.16
Total	$33,305,648	$339.04

Building associated Capitalized Interest and Loan Placement Fees were calculated as follows:

Hospital	New	Renovation	Total		
Building Cost	$35,946,047				
Subtotal Cost (w/o Cap Interest)	$43,141,744		$43,141,744		
Subtotal/Total	100.0%	0.0%	Cap Interest	Financing	Total
Total Project Cap Interest &Financing [(Subtotal Cost/Total Cost) X Total Cap Interest]	$7,192,736	$0	$6,566,503	$626,233	$7,192,736
Building/Subtotal	83.3%	N/A			
Building Cap Interest & Financing	$5,993,046	N/A			
Associated with Extraordinary Costs	$2,637,626				
Applicable Cap Interest & Loan Place.	$3,355,420				

As noted below, the project's cost per square foot is consistent with the MVS benchmark.

MVS Benchmark	$386.20
The Project	$339.04
Difference	-$47.16
	-12.21%

(8) <u>Construction Cost of Non-Hospital Space</u>.

The proposed construction costs of non-hospital space shall be reasonable and in line with current industry cost experience. The projected cost per square foot of non-hospital space shall be compared to the benchmark cost of good quality Class A construction given in the Marshall Valuation Service® guide for the appropriate structure. 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 non-hospital space 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. In general, rate increases authorized for hospitals should not recognize the costs associated with construction of non-hospital space.

Applicants' response: This standard is inapplicable.

(9) Inpatient Nursing Unit Space.

Space built or renovated for inpatient nursing units that exceeds reasonable space standards per bed for the type of unit being developed shall not be recognized in a rate adjustment. If the Inpatient Unit Program Space per bed of a new or modified inpatient nursing unit exceeds 500 square feet per bed, 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 for the space that exceeds the per bed square footage limitation in this standard or those portions of the contingency allowance, inflation allowance, and capitalized construction interest expenditure that are based on the excess space.

Applicants' response: The proposed patient bed floors on Levels 4 and 5 of the proposed project are 26,290 square foot per floor for a total of 52,580 square feet. For 72 new patient beds (30 MSGA and 42 observation), this equates to 730 square feet per bed. The space per bed is higher than a traditional bed unit given its location above an existing Kaufman Cancer Center with a set footprint and includes larger semi-private observation rooms. The larger support core space is also required given the remote location of these units from the support service chassis of UCMC. All nurse station and support spaces meet the current edition of the FGI Guidelines. Additional mechanical shaft space is also required in the building core to allow for mechanical services to be delivered from the roof through our new units to the Kaufman Cancer Center below. The floor area has also been designed to include a connector to the existing hospital units requiring more circulation space. In any event, UCMC will not seek a rate increase associated with the proposed project for construction costs for the space that exceeds the 500 per bed square foot limitation.

(10) Rate Reduction Agreement.

A high-charge hospital will not be granted a Certificate of Need to establish a new acute care service, or to construct, renovate, upgrade, expand, or modernize acute care facilities, including support and ancillary facilities, unless it has first agreed to enter into a rate reduction agreement with the Health Services Cost Review Commission, or the Health Services Cost Review Commission has determined that a rate reduction agreement is not necessary.

Applicants' response: This standard is inapplicable; UCMC is not a high-charge hospital.

(11) Efficiency.

A hospital shall be designed to operate efficiently. Hospitals proposing to replace or expand diagnostic or treatment facilities and services shall:

(a) Provide an analysis of each change in operational efficiency projected for each diagnostic or treatment facility and service being replaced or expanded, and document the manner in which the planning and design of the project took efficiency improvements into account; and

(b) Demonstrate that the proposed project will improve operational efficiency when the proposed replacement or expanded diagnostic or treatment facilities and services are projected to experience increases in the volume of services delivered; or

(c) Demonstrate why improvements in operational efficiency cannot be achieved.

Applicants' response: The relocation of MSGA beds from HMH to UCMC does not require replacement or expansion of any diagnostic or treatment facilities at UCMC, however, laboratory and imaging volumes are projected to increase with the transfer of MSGA patient from HMH to UCMC and observation patients with stays approaching 48 hours from UC FMF to UCMC. However, there is a need to expand non-clinical support services, including dietary, environmental, and security services.

Additionally, the relocation of MSGA beds from HMH to UCMC will allow UCMC to more effectively distribute patients who are in an observation status to a dedicated observation units. Currently, with the exception of a 10 bed CDU, UCMC has its observation patient population scattered throughout all of its medical surgical units. This geographic dispersion of observation patients does not support optimum patient management as it relates to focused attention on timely diagnostic treatment. However, a clinical practice model that incorporates a dedicated observation unit provides a setting for focused attention to lower acuity patients from admission to the observation unit through discharge, thereby minimizing unnecessary testing and ultimately reducing lengths of stay. By establishing a dedicated observation unit clinical model, with the appropriate staffing matrix to support short lengths of stay and therefore rapid turnover of patients on the unit, UCMC expects that the enhanced efficiencies will ultimately support enhanced clinical outcomes as well as positively impact overall patient experience.

The following summary provides an overview of the clinical, safety, and efficiency factors supporting UCMC's plans for a dedicated observation unit, including enhanced security benefits, enhanced room design to support high quality clinical practice (i.e. medication administration delivery system), and enhanced the patient and family experience:

- Infection Prevention & Control:
  - Provision of individual toilets and showers reduces the incidence of infections
  - Physical separation within the semi-private rooms to enhance infection prevention

- Fall Prevention:
  - Due to the configuration of the rooms staff can see the entire patient room from entry
  - Space design supports area for family attendance providing added support to the patient who may be at risk for falls
  - Room design provides for a clear path of travel within the room reducing obstacles likely to cause falls
  - Bathrooms are configured in close proximity to the head wall decreasing distance patient needs to ambulate to the bathroom reducing likelihood of falls

- Room design includes continuous handrails from the head of the bed to the toilet room reducing the likelihood of falls
- Toilets and showers were designed to minimize fall risk

- Operational Efficiencies:
  - Clear path of travel within the room for efficient patient transfers and transports
  - Design allows for adequate space at each patient zone for mobile lift equipment when needed
  - Design allows staff visibility of the entire room

- Patient Care/Clinical practice enhancements:
  - Standardized head wall provides clear individual patient zone
  - Design provides a physical, visual, and auditory separation between patients enhancing clinical practice (medication zones)

- Patient & Family Experience:
  - The design of the zoned semi-private rooms provides a physical, visual and auditory separation between patients enhancing the individual patient/family experience.
  - Room design allows for a patient's significant other to stay in a recliner chair during their short stay providing additional support the patient may need thereby enhancing their short stay observation experience.

(12) Patient Safety.

The design of a hospital project shall take patient safety into consideration and shall include design features that enhance and improve patient safety. A hospital proposing to replace or expand its physical plant shall provide an analysis of patient safety features included for each facility or service being replaced or expanded, and document the manner in which the planning and design of the project took patient safety into account.

Applicants' response: The design of the proposed project took patient safety into consideration and includes design features, including a dedicate observation unit, that will enhance and improve patient safety. *See* the Applicants' response to COMAR 10.24.10.04(B)(11) above.

(13) Financial Feasibility.

A hospital capital project shall be financially feasible and shall not jeopardize the long-term financial viability of the hospital.

(a) Financial projections filed as part of a hospital Certificate of Need application must be accompanied by a statement containing each assumption used to develop the projections.

Applicants' response: Included in **Exhibit 1** are **Tables F, G**, and **H**, which provide

utilization and financial projections, and a comprehensive statement of assumptions related to utilization, revenue, expenses, and financial performance for UM UCH, which includes UCMC and HMH from fiscal year 2017 through fiscal year 2022 and UCMC, UC FMF and UC Behavioral Health from fiscal year 2022 to 2024. Also included in **Exhibit 1** are **Tables I**, **J**, and **K**, which provide utilization and financial projections that include a comprehensive statement of assumptions related to the impact on UCMC's utilization, revenue, expenses, and financial performance of shifting MSGA beds from HMH beginning in fiscal year 2022.

(b) Each applicant must document that:

(i) Utilization projections are consistent with observed historic trends in use of the applicable service(s) by the service area population of the hospital or State Health Plan need projections, if relevant;

Applicants' response: **Exhibit 1**, **Table F** includes utilization projections that reflect both the inpatient and outpatient utilization of UM UCH at UCMC and HMH from fiscal year 2017 to 2018 and UCMC, UC FMF and UC Behavioral Health from fiscal year 2022 to 2024 including inpatient discharges and patient days, as well as outpatient emergency department visits, observation cases, and related outpatient ancillary services. **Exhibit 1**, **Table I** presents the inpatient utilization and outpatient utilization associated with the inpatient and outpatient utilization that will shift from HMH beginning in fiscal year 2002.

Included in the bed need projections in response to COMAR 10.24.10.04B(2)(a)-(c) and **Exhibit 6** and are bed need assumptions at UCMC and HMH which include the projected shift of inpatient MSGA beds from HMH in fiscal year 2022. The projections of outpatient services assume the continuation of UCMC's existing emergency, observation, surgery, and other ancillary services with annual population growth through fiscal year 2024.

(ii) Revenue estimates are consistent with utilization projections and are based on current charge levels, rates of reimbursement, contractual adjustments and discounts, bad debt, and charity care provision, as experienced by the applicant hospital or, if a new hospital, the recent experience of other similar hospitals;

Applicants' response: Revenue projections in **Tables H** and **K** reflect the utilization projections presented above and the 2018 regulated Global Budget Revenue (GBR) assumptions related to update factors, demographic adjustments, revenue variability, and uncompensated care. These assumptions are included with the tables.

(iii) Staffing and overall expense projections are consistent with utilization projections and are based on current expenditure levels and reasonably anticipated future staffing levels as experienced by the applicant hospital, or, if a new hospital, the recent experience of other similar hospitals; and

Applicants' response: Staffing and overall expense projections in **Tables H** and **K** reflect the utilization projections presented above and assumptions related to expense inflation,

expense variability with changes in volumes and one-time adjustments to the projection of staffing and expense when HMH closes and UC FMF opens in fiscal year 2022.

(iv) The hospital will generate excess revenues over total expenses (including debt service expenses and plant and equipment depreciation), if utilization forecasts are achieved for the specific services affected by the project within five years or less of initiating operations with the exception that a hospital may receive a Certificate of Need for a project that does not generate excess revenues over total expenses even if utilization forecasts are achieved for the services affected by the project when the hospital can demonstrate that overall hospital financial performance will be positive and that the services will benefit the hospital's primary service area population.

Applicants' response: As presented in **Table K**, UCMC is projected to generate positive operating income in each year of the projection period of $19.1 million in fiscal year 2020 to $28.8 million in fiscal year 2024.

(14) <u>Emergency Department Treatment Capacity and Space</u>.

(a) An applicant proposing a new or expanded emergency department shall classify service as low range or high range based on the parameters in the most recent edition of *Emergency Department Design: A Practical Guide to Planning for the Future* from the American College of Emergency Physicians. The number of emergency department treatment spaces and the departmental space proposed by the applicant shall be consistent with the range set forth in the most recent edition of the American College of Emergency Physicians *Emergency Department Design: A Practical Guide to Planning for the Future*, given the classification of the emergency department as low or high range and the projected emergency department visit volume.

Applicants' response: This standard is inapplicable. The project does not involve new or expanded emergency department treatment space.

(b) In developing projections of emergency department visit volume, the applicant shall consider, at a minimum:

(i) The existing and projected primary service areas of the hospital, historic trends in emergency department utilization at the hospital, and the number of hospital emergency department service providers in the applicant hospital's primary service areas;

(ii) The number of uninsured, underinsured, indigent, and otherwise underserved patients in the applicant's primary service area and the impact of these patient groups on emergency department use;

(iii) Any demographic or health service utilization data and/or analyses that support the need for the proposed project;

(iv) The impact of efforts the applicant has made or will make to divert non-emergency cases from its emergency department to more appropriate primary care or urgent care settings; and

(v) Any other relevant information on the unmet need for emergency department or urgent care services in the service area.

Applicants' response: This standard is inapplicable. The project does not involve new or expanded emergency department treatment space.

(15) Emergency Department Expansion.

A hospital proposing expansion of emergency department treatment capacity shall demonstrate that it has made appropriate efforts, consistent with federal and state law, to maximize effective use of existing capacity for emergent medical needs and has appropriately integrated emergency department planning with planning for bed capacity, and diagnostic and treatment service capacity. At a minimum:

(a) The applicant hospital must demonstrate that, in cooperation with its medical staff, it has attempted to reduce use of its emergency department for non-emergency medical care. This demonstration shall, at a minimum, address the feasibility of reducing or redirecting patients with non-emergent illnesses, injuries, and conditions, to lower cost alternative facilities or programs;

(b) The applicant hospital must demonstrate that it has effectively managed its existing emergency department treatment capacity to maximize use; and

(c) The applicant hospital must demonstrate that it has considered the need for bed and other facility and system capacity that will be affected by greater volumes of emergency department patients.

Applicants' response: This standard is inapplicable; the project does not involve emergency department expansion.

(16) Shell Space.

(a) Unfinished hospital shell space for which there is no immediate need or use shall not be built unless the applicant can demonstrate that construction of the shell space is cost effective.

Applicants' response: The proposed project includes construction of 26,290 square feet of shell space on the third floor of the proposed addition above the Kaufman Cancer Center. The shell space on this floor will support finished building space on upper floors. The

estimated cost of constructing the shell space as part of this proposed project is $3,170,406 and will accommodate growth for the Kaufman Cancer Center's diagnostic and treatment services within the next three years.

Providing this shell floor directly above the Kaufman Cancer Center will allow for future expansion with limited impact to the daily operations of the Kaufman Cancer Center including mitigation of construction noise, leaks, and HVAC outages. If the shell space was not constructed during this planned expansion and UCMC required to construct an additional floor in the near future, the following impacts would be anticipated:

- Relocation of mechanical equipment would be needed;
- Replacement of roof screens would be needed;
- A new crane location would be needed due to inability to use the existing shaft. As an alternative, the loading dock would need to be used for a new crane location which would require a temporary location of hospital's loading dock;
- Another replacement roof would be needed;
- Disruption of occupied space would impact end users in inpatient units;
- There would be an extended schedule for fit out for the developed space that would be subject to existing patient census;
- New air handling units would be needed as UCMC could not shut down existing air handling units to add another floor; and
- A detrimental impact on everyday hospital operations and patient/visitor experience.

The addition of shell space now is reasonable to limit disruption of the Kaufman Cancer Center's operations, to allow for future expansion, and is cost effective. *See also* response to 10.24.10.04(B)(16)(c) below.

(b) If the proposed shell space is not supporting finished building space being constructed above the shell space, the applicant shall provide an analysis demonstrating that constructing the space in the proposed time frame has a positive net present value that:

(i) Considers the most likely use identified by the hospital for the unfinished space;

(ii) Considers the time frame projected for finishing the space; and

(iii) Demonstrates that the hospital is likely to need the space for the most likely identified use in the projected time frame.

Applicants' response: This standard is inapplicable, the proposed shell space will support finished building space.

(c) Shell space being constructed on lower floors of a building addition that supports finished building space on upper floors does not require a net present value analysis. Applicants shall provide information on the cost, the most likely uses,

and the likely time frame for using such shell space.

Applicants' response: The proposed project includes construction of 26,290 square feet of shell space on the third floor of the proposed addition above the Kaufman Cancer Center. The shell space on this floor will support finished building space on upper floors. The estimated cost of constructing the shell space as part of this proposed project is $3,170,406 and will accommodate growth for the Kaufman Cancer Center's diagnostic and treatment services within the next three years. Expansion of the Kaufman Cancer Center is incorporated into UM UCH's approved strategic capital plan.

More specifically, the third floor will house a hematology and oncology practice. Plans for expansion of the Kaufman Cancer Center include:

First Floor:

- Expand Cancer Center Administrative space specifically the clinical research area as well as expand the Integrated Health suite towards the eastside of the first floor which will require the displacement of the current Multi-D and physician specialty practice suite
- The Multi-D and physician specialty practice suite would be moved to the second floor and requires expansion to meet the increased demand for services

Second Floor:

- The Hematology and Oncology physician practice will need to be relocated to the third floor and also requires an expansion of space
- Infusion Services also requires expansion into the eastern portion of the current Hematology/Oncology physician practice suite.
- The balance of the former Hematology/Oncology physician practice suite will be replaced with the relocated Multi-D and physician specialty practice suite from the first floor with an increase in square footage
- At this point there is not an anticipated change to the Breast Center space however it is anticipated that this will be needed in the mid-longer term time frame

Third Floor:

- The third floor (result of the vertical expansion) will house the relocated and expanded Hematology/Oncology physician practice and an expanded Tumor Board/Multispecialty team conferencing space for enhanced telemedicine connection with the Greenebaum Cancer Center and affiliate UM Health System tumor board alignment
- The practice expansion includes a new Pod Model of service to provide more personalized and directed waiting areas, exam rooms and associated office and support staff space for this physician practice.

- Within the Hematology/Oncology physician practice there will be space Telemedicine space for expanded collaboration with UMMS resources for second opinion services with the Greenebaum Cancer Center specialty resources

Including one floor of shell space as part of the proposed project directly above the Kaufman Cancer Center will allow for future expansion with limited impact to the daily operations of the Kaufman Cancer Center including mitigation of construction noise, leaks, and HVAC outages. If the shell space was not constructed during this planned expansion and UCMC required to construct an additional floor in the near future, the following impacts would be anticipated:

- Relocation of mechanical equipment would be needed;
- Replacement of roof screens would be needed;
- A new crane location would be needed due to inability to use the existing shaft; As an alternative, the loading dock would need to be used for a new crane location which would require a temporary location of hospital's loading dock;
- Another replacement roof would be needed;
- Disruption of occupied space would impact end users in inpatient units;
- There would be an extended schedule for fit out for the developed space that would be subject to existing patient census;
- New air handling units would be needed as UCMC could not shut down existing air handling units to add another floor; and
- A detrimental impact on everyday hospital operations and patient/visitor experience.

The addition of shell space now is reasonable to limit disruption of the Kaufman Cancer Center's operations, to allow for future expansion, and is cost effective.

(d) The cost of shell space included in an approved project and those portions of the contingency allowance, inflation allowance, and capitalized construction interest expenditure that are based on the construction cost of the shell space will be excluded from consideration in any rate adjustment by the Health Service Cost Review Commission.

Applicants' response: This standard is inapplicable; the Applicants' do not intend to seek a rate adjustment from the HSCRC.

COMAR 10.24.01.04E

The Commission shall issue a determination of exemption from Certificate of Need review to the health care facility or the merged asset system seeking this determination within 45 days after it receives the notice of intent required by §B of this regulation, if:

(1) The facility or system has provided the information required by the notice of intent, and has held a public informational hearing if required by §D of this regulation; and

Applicants' response: This standard is inapplicable by application of the State Health Plan Chapter for Freestanding Medical Facilities. While HMH will close after converting to a freestanding medical facility and merging and consolidating with UCMC, no separate public informational hearing is required apart from that held pursuant to COMAR 10.24.19.04C(3)(c)(ii).

(2) The Commission, in its sole discretion, finds that the action proposed:

(a) Is in the public interest;

Applicants' response: The proposed project is part of UM UCH's vision to create an optimal integrated health delivery system for the residents it services by providing care for patients in the right setting at the right time, at the lowest cost. Ultimately, it is the goal of UCH to enhance the care delivery model by building contemporary state-of-the-art facilities which not only addresses the recognized needs for acute inpatient and behavioral health needs within its community, but which also offer services that continue to deliver consistent high quality patient outcomes and maximizes financial, operational and provider efficiencies.

The major goals of a regionally integrated care network include:

- Clinical and program development and Population Health collaboration;
- Facilitated coordination of healthcare throughout the services areas of the existing health systems and hospitals;
- When appropriate shared, physician recruitment activities; and
- Programs to improve administrative efficiency, including, but not limited to, cost efficiency and cost savings.

Key aspects to the regionally integrated care network plan include the transition of HMH from an acute care general hospital to a freestanding medical facility. Following this conversion, there will be a reduction in MSGA beds in Harford County, which will require the proposed expansion of UCMC. As noted above, the Commission projects a minimum need for 168 MSGA beds in Harford County in 2025 and a maximum bed need of 223. Maryland Register v. 44, Issue 2 (Jan. 20, 2017). UCMC is presently licensed for only 138 MSGA beds. Accordingly, upon conversion of HMH to a freestanding medical facility, Harford County will have fewer MSGA beds that the Commission's projected need. The proposed project ensures that the residents of UCH's service area will have continued access to acute hospital services which is clearly in the public interest.

In addition to HMH's inpatient medical surgical beds, its inpatient psychiatric beds will also be transitioned to a new special psychiatric hospital located at UC Medical Campus at Aberdeen. These inpatient psychiatric services will be aligned with a robust array of outpatient behavioral health services. This regional approach to the delivery of health care services provides greater access to health care services with improved geographic distribution across the two counties.

The proposed project is, therefore, is in the public interest.

(b) Is not inconsistent with the State Health Plan or an institution-specific plan developed by the Commission under Health-General Article, §19-122, Annotated Code of Maryland; and

Applicants' response: *See* the Applicants' responses to COMAR 10.24.10.04 above.

(c) Will result in more efficient and effective delivery of health care services.

Applicants' response: UM UCH and the applicants have determined that the relocation of HMH's MSGA beds to UCMC will result in more efficient and effective services. The establishment of a dedicated observation unit will not only improve the efficiency of the care for patients with short stays, it will improve operational efficiencies overall within the system. As previously noted, observation stay patients are dispersed across all MSGA units and patients are frequently transferred between beds and between different nursing units, in order to accommodate the needs of the acute, inpatient medical surgical patient population. It is anticipated that the level of patient transfers between units and patient rooms would be significantly reduced with the implementation of a dedicated observation unit. Reducing patient transfer activity will directly impact operational and staffing efficiencies within the nursing, ancillary, and support services teams. Centralizing observation patients on one dedicated unit will also allow for the centralization of the inpatient acute care patient population appropriately on the medical surgical units. This model of care will support optimal staffing patterns, allowing for all staff to function at their highest, appropriate level.

Moreover, the project will achieve cost efficiencies over the long term. As is the case with many aging hospitals that were built over the span of several decades, HMH is not constructed to current best practices and energy codes. The cost, timing, and disruption to ongoing healthcare operation, compounded by numerous physical constraints make the replacement of the facility a more cost effective alternative. The following is a partial list of mechanical, electrical, and plumbing infrastructure inefficiencies at HMH that will be remediated by the relocation of acute MSGA inpatient services from HMH to UCMC under the proposed project:

a) HMH's building envelope was not constructed to meet current R-values required by code. (Roof insulation, wall insulation, below grade foundation insulation, single pane windows). The proposed project will allow for required insulation R-values in the roof, walls and ceiling, with exterior glazing to be low E with double pane glazing.

b) HMH has inefficient hospital boilers, while the proposed project will have higher efficiency units.

c) HMH currently uses water cooled cooling towers whereas the proposed project will use air cooled chillers.

d) HMH uses two-pipe heating and cooling systems while the proposed project will include a system that more accurately provides desired patient care temperatures.

e) HMH has a dedicated split system cooling and other condensing units that provide cool air without monitoring, whereas the proposed project will utilize centralized cooling systems that can be more accurately programmed and monitored for usage.

f) HMH's plumbing fixtures are outdated and the proposed project will have lower flow heads and fixtures that require less consumption of water.

g) HMH has inefficient lighting fixtures and ballasts while the proposed project will use higher efficiency fluorescent fixtures and/or LED fixtures.

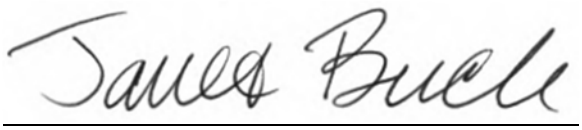
h) HMH's light fixtures are currently on timers or manual switches but the proposed project will have modern occupancy sensors that turn lights off when spaces sit idle.

For all of the reasons above, the proposed project satisfies this standard.

CONCLUSION

For all of the reasons set forth above, HMH and UCMC respectfully request that the Commission authorize the merger and consolidation of HMH and UCMC and associated capital expenditures.

Respectfully submitted,



James C. Buck
Gallagher, Evelius & Jones LLP
218 N. Charles Street, Suite 400
Baltimore, Maryland 21201

Counsel for UM Upper Chesapeake Medical Center, Inc. and UM Harford Memorial Hospital, Inc.

Table of Exhibits

Exhibit	Description
1.	MHCC Tables
2.	Project drawings
3.	UM UCH's Policy Regarding Charges
4.	UM UCH's Financial Assistance Policy and Financial Assistance Form
5.	UCMC and HMH licensure, Joint Commission accreditation, and documentation of Medicare and Medicaid participation
6.	Projected Shift of HMH Observation Cases to MSGA Admissions
7.	HKS and Whiting-Turner UCMC Development Alternatives

Table of Tables

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

10.21.19
Date

Lyle E. Sheldon
President and Chief Executive Officer
University of Maryland Upper
Chesapeake Health System

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

October 18, 2019
Date

Stephen Witman

Stephen Witman
Senior Vice President, Chief Financial Officer
University of Maryland Upper Chesapeake Health System

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

10.21.19
Date

Robin Luxon
Senior Vice President, Corporate Planning, Marketing & Business Development
University of Maryland Upper Chesapeake Health System

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

10-18-19
Date

Amale Obeid
Director of Planning and Business Development
University of Maryland Upper Chesapeake Health System

#659186
011888-0023

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

10/18/19
Date

Phillip D. Crocker
Project Manager
University of Maryland Upper
Chesapeake Health System

#659189
011888-0023

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

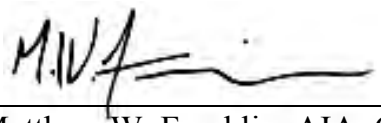
10/18/19
Date

Andrew L. Solberg
A.L.S. Healthcare Consultant Services

#659194
011888-0023

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief.

October 18, 2019
Date



Matthew W. Franklin, AIA, CDT
Principal | Project Manager
HKS Inc.

#659200
011888-0023

EXHIBIT 1

TABLE A. PHYSICAL BED CAPACITY BEFORE AND AFTER PROJECT

INSTRUCTIONS: Identify the location of each nursing unit (add or delete rows if necessary) and specify the room and bed count before and after the project in accordance with the definition of physical capacity noted below. Applicants should add columns and recalculate formulas to address rooms with 3 and 4 bed capacity. NOTE: Physical capacity is the total number of beds that could be physically set up in space without significant renovations. This should be the maximum operating capacity under normal, non-emergency circumstances and is a physical count of bed capacity, rather than a measure of staffing capacity. A room with two headwalls and two sets of gasses should be counted as having capacity for two beds, even if it is typically set up and operated with only one bed. A room with one headwall and one set of gasses is counted as a private room, even if it is large enough from a square footage perspective to be used as a semi-private room, since renovation/construction would be required to convert it to semi-private use. If the hospital operates patient rooms that contain no headwalls or a single headwall, but are normally used to accommodate one or more than one patient (e.g., for psychiatric patients), the physical capacity of such rooms should be counted as they are currently used.

Before the Project							After Project Completion						
Hospital Service	Location (Floor/ Wing)*	Licensed Beds: 7/1/2018	Based on Physical Capacity				Hospital Service	Location (Floor/ Wing)*	Based on Physical Capacity				
			Room Count			Bed Count			Room Count			Bed Count	
			Private	Semi-Private	Total Rooms	Physical Capacity			Private	Semi-Private	Total Rooms	Physical Capacity	
ACUTE CARE							**ACUTE CARE**						
General Medical/ Surgical*	1 West	23	25	1	26	27	**General Medical/ Surgical***	1 West	25	1	26	27	
	2 West	17	13	8	21	29		2 West	13	8	21	29	
	2 East	24	25	0	25	25		2 East	25	0	25	25	
	3 West	19	15	8	23	31		3 West	15	8	23	31	
	3 East	36	31	8	39	47		3 East	31	8	39	47	
	IMC	6	0	3	3	6		IMC	0	3	3	6	
								5 West	30	0	30	30	
SUBTOTAL Gen. Med/Surg*		**125**	**109**	**28**	**137**	**165**	**SUBTOTAL Gen. Med/Surg***		**139**	**28**	**167**	**195**	
ICU/CCU	2 East	**13**	14	0	14	14	**ICU/CCU**	2 East	14	0	14	14	
								IMC	3	0	3	3	
Other *(Specify/add rows as needed)*					0	0					0	0	
TOTAL MSGA		**138**	**123**	**28**	**151**	**179**	**TOTAL MSGA**		**132**	**28**	**184**	**212**	
Obstetrics	1 East	**10**	14	0	14	14	**Obstetrics**	1 East	14	0	14	14	
Pediatrics	1 East	**1**	9	0	9	9	**Pediatrics**	1 East	9	0	9	9	
Psychiatric					0	0	**Psychiatric**				0	0	
TOTAL ACUTE		**149**	**146**	**28**	**174**	**202**	**TOTAL ACUTE**		**155**	**28**	**207**	**235**	
NON-ACUTE CARE							**NON-ACUTE CARE**						
Dedicated Observation**		**0**	0	**0**	0	0	**Dedicated Observation****	CDU***	0	**0**	0	0	
					0	0		4 West	0	**21**	21	42	
Other *(Specify/add rows as needed)*					0	0	**Other** *(Specify/add rows as needed)*				0	0	
TOTAL NON-ACUTE							**TOTAL NON-ACUTE**		**0**	**21**	**21**	**42**	
HOSPITAL TOTAL		**149**	**146**	**28**	**174**	**202**	**HOSPITAL TOTAL**		**155**	**49**	**228**	**277**	

* Include beds dedicated to gynecology and addictions, if unit(s) is separate for acute psychiatric unit

** Include services included in the reporting of the "Observation Center". Service furnished by the hospital on the hospital's promise, including use of a bed and periodic monitoring by the hospital's nursing or other staff, which are reasonable and necessary to determine the need for a possible admission to the hospital as an inpatient; Must be ordered and documented in writing, given by a medical practitioner.

*** The CDU or Clinical Decision Unit is a single room with 10 beds located near the Emergency Department which presently serves as UCMC's dedicated observation unit.

TABLE A. PHYSICAL BED CAPACITY BEFORE AND AFTER PROJECT

INSTRUCTIONS: Identify the location of each nursing unit (add or delete rows if necessary) and specify the room and bed count before and after the project in accordance with the definition of physical capacity noted below. Applicants should add columns and recalculate formulas to address rooms with 3 and 4 bed capacity. NOTE: Physical capacity is the total number of beds that could be physically set up in space without significant renovations. This should be the maximum operating capacity under normal, non-emergency circumstances and is a physical count of bed capacity, rather than a measure of staffing capacity. A room with two headwalls and two sets of gasses should be counted as having capacity for two beds, even if it is typically set up and operated with only one bed. A room with one headwall and one set of gasses is counted as a private room, even if it is large enough from a square footage perspective to be used as a semi-private room, since renovation/construction would be required to convert it to semi-private use. If the hospital operates patient rooms that contain no headwalls or a single headwall, but are normally used to accommodate one or more than one patient (e.g., for psychiatric patients), the physical capacity of such rooms should be counted as they are currently used.

Before the Project							After Project Completion						
Hospital Service	Location (Floor/ Wing)*	Licensed Beds: 7/1/2018	Based on Physical Capacity				Hospital Service	Location (Floor/ Wing)*	Based on Physical Capacity				
			Room Count			Bed Count			Room Count			Bed Count	
			Private	Semi-Private	Total Rooms	Physical Capacity			Private	Semi-Private	Total Rooms	Physical Capacity	
ACUTE CARE							**ACUTE CARE**						
General Medical/ Surgical*	1 West	23	25	1	26	27	**General Medical/ Surgical***	1 West	25	1	26	27	
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	3 East	36	31	8	39	47		3 East	31	8	39	47	
	IMC	6	0	3	3	6		1 East	6	0	6	6	
								5 West	30	0	30	30	
SUBTOTAL Gen. Med/Surg*		**125**	**109**	**28**	**137**	**165**	**SUBTOTAL Gen. Med/Surg***		**115**	**25**	**140**	**195**	
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								IMC	3	0	3	3	
Other *(Specify/add rows as needed)*					0	0					0	0	
TOTAL MSGA		**138**	**123**	**28**	**151**	**179**	**TOTAL MSGA**		**132**	**25**	**157**	**212**	
Obstetrics	1 East	**10**	14	0	14	14	**Obstetrics**	1 East	14	0	14	14	
Pediatrics	1 East	**1**	9	0	9	9	**Pediatrics**	1 East	2	0	2	2	
Psychiatric					0	0	**Psychiatric**				0	0	
TOTAL ACUTE		**149**	**146**	**28**	**174**	**202**	**TOTAL ACUTE**		**148**	**25**	**173**	**228**	
NON-ACUTE CARE							**NON-ACUTE CARE**						
Dedicated Observation**	CDU***	**0**	10	**0**	10	10	**Dedicated Observation****	CDU***	0	**0**	0	0	
					0	0		4 West	0	**21**	21	42	
Other *(Specify/add rows as needed)*					0	0	**Other** *(Specify/add rows as needed)*				0	0	
TOTAL NON-ACUTE							**TOTAL NON-ACUTE**		**0**	**21**	**21**	**42**	
HOSPITAL TOTAL		**149**	**156**	**28**	**184**	**212**	**HOSPITAL TOTAL**		**148**	**46**	**194**	**270**	

* Include beds dedicated to gynecology and addictions, if unit(s) is separate for acute psychiatric unit

** Include services included in the reporting of the "Observation Center". Service furnished by the hospital on the hospital's promise, including use of a bed and periodic monitoring by the hospital's nursing or other staff, which are reasonable and necessary to determine the need for a possible admission to the hospital as an inpatient; Must be ordered and documented in writing, given by a medical practitioner.

*** The CDU or Clinical Decision Unit is a single room with 10 beds located near the Emergency Department which presently serves as UCMC's dedicated observation unit.

TABLE B. DEPARTMENTAL GROSS SQUARE FEET AFFECTED BY PROPOSED PROJECT

INSTRUCTION : Add or delete rows if necessary. See additional instruction in the column to the right of the table.

DEPARTMENT/FUNCTIONAL AREA	DEPARTMENTAL GROSS SQUARE FEET				
	Current	To be Added Thru New Construction	To Be Renovated	To Remain As Is	Total After Project Completion
Med / Surg Patient Unit Level 5		26,290			26,290
Observation Unit Level 4		26,290			26,290
Food Service & EVS Expansion		8,960			8,960
Shell Space Level 3		26,290			26,290
Central Utility Plant			8,300		8,300
Existing Cancer Center		1,020	494		1,514
					0
					0
					0
					0
					0
					0
					0
					0
					0
Total	0	88,850	8,794	0	

TABLE C. CONSTRUCTION CHARACTERISTICS

INSTRUCTION: If project includes non-hospital space structures (e.g., parking garges, medical office buildings, or energy plants), complete an additional Table C for each structure.

	NEW CONSTRUCTION	RENOVATION
BASE BUILDING CHARACTERISTICS	**Check if applicable**	
Class of Construction (for renovations the class of the building being renovated)*		
Class A	☑	☑
Class B	☐	☐
Class C	☐	☐
Class D	☐	☐
Type of Construction/Renovation*		
Low	☐	☐
Average	☐	☐
Good	☑	☑
Excellent	☐	☐
Number of Stories	3	2

*As defined by Marshall Valuation Service

PROJECT SPACE	**List Number of Feet, if applicable**	
Total Square Footage	**88,850**	**8,794**
Ground Floor	8,960	
First Floor	510	494
Second Floor	510	
Third Floor	26,290	
Fourth Floor	26,290	
Fifth Floor	26,290	
Central Utility Plant		8,300
Average Square Feet	**14,808**	**2,931**
Perimeter in Linear Feet	**Linear Feet**	
Ground Floor	436	395
First Floor	94	135
Second Floor	94	
Third Floor	776	
Fourth Floor	776	
Fifth Floor	776	
Central Utility Plant		371
Total Linear Feet	**2,952**	**901**
Average Linear Feet	**492**	**451**
Wall Height (floor to eaves)	**Feet**	
Ground Floor	16	16
First Floor	16	16
Second Floor	16	16
Third Floor	16	
Fourth Floor	16	
Fifth Floor	19	
Central Utility Plant		16
Average Wall Height	**17**	**16**
OTHER COMPONENTS		
Elevators	**List Number**	
Passenger	3	
Freight	2	
Sprinklers	**Square Feet Covered**	
Wet System	88,850	8,794
Dry System		
Other	**Describe Type**	
Type of HVAC System for proposed project	Excellent Grade - Forced Air: VAV / Constant Volume, Digitally Controlled	
Type of Exterior Walls for proposed project	Glass Curtain Wall, Brick Veneer, Metal Panels	

TABLE D. ONSITE AND OFFSITE COSTS INCLUDED AND EXCLUDED IN MARSHALL VALUATION COSTS

INSTRUCTION: If project includes non-hospital space structures (e.g., parking garges, medical office buildings, or energy plants), complete an additional Table D for each structure.

	NEW CONSTRUCTION COSTS	RENOVATION COSTS
SITE PREPARATION COSTS		
Normal Site Preparation	$236,492	$0
Utilities from Structure to Lot Line	$0	$0
Subtotal included in Marshall Valuation Costs	**$236,492**	**$0**
Site Demolition Costs	**$0**	**$0**
Storm Drains	**$0**	**$0**
Rough Grading	**$0**	**$0**
Hillside Foundation	**$0**	**$0**
Paving	**$0**	**$0**
Exterior Signs	**$0**	**$0**
Landscaping	$0	$0
Walls	$0	$0
Yard Lighting	$0	$0
Premium for Minority Business Enterprise Requirement	$9,854	$0
Subtotal On-Site excluded from Marshall Valuation Costs	**$9,854**	**$0**
OFFSITE COSTS		
Roads	$0	$0
Utilities	$0	$0
Jurisdictional Hook-up Fees	$0	$0
Other *(Specify/add rows if needed)*	$0	$0
Subtotal Off-Site excluded from Marshall Valuation Costs	**$0**	**$0**
TOTAL Estimated On-Site and Off-Site Costs not included in Marshall Valuation Costs	**$9,854**	**$0**
TOTAL Site and Off-Site Costs included and excluded from Marshall Valuation Service*	**$246,346**	**$0**
BUILDING COSTS		
Normal Building Costs	$22,764,385	$1,583,895
Subtotal included in Marshall Valuation Costs	$22,764,385	**$1,583,895**
Complexity Premium	$3,594,605	
Demolition	$1,085,820	
2/5 HVAC System	$3,055,552	
OVHD Bridges	$2,535,000	
Pneumatic tube	$466,440	
Signage	$132,454	
Elevator Premium	$873,950	
Premium for Minority Business Enterprise Requirement	$1,437,842	
Subtotal Building Costs excluded from Marshall Valuation Costs	**$13,181,662**	**$0**
TOTAL Building Costs included and excluded from Marshall Valuation Service*	**$35,946,047**	**$1,583,895**
A&E COSTS		
Normal A&E Costs	$4,628,765	$219,817
Subtotal included in Marshall Valuation Costs	**$4,628,765**	**$219,817**
Subtotal A&E Costs excluded from Marshall Valuation Costs	**$0**	**$0**
TOTAL A&E Costs included and excluded from Marshall Valuation Service*	**$4,628,765**	**$219,817**
PERMIT COSTS		
Normal Permit Costs	$2,320,586	$104,675
Subtotal included in Marshall Valuation Costs	**$2,320,586**	**$104,675**
Jurisdictional Hook-up Fees	$0	$0
Impact Fees	$0	$0
Subtotal Permit Costs excluded from Marshall Valuation Costs	**$0**	**$0**
TOTAL Permit Costs included and excluded from Marshall Valuation Service*	**$2,320,586**	**$104,675**

TABLE E. PROJECT BUDGET

INSTRUCTION: Estimates for Capital Costs (1.a-e), Financing Costs and Other Cash Requirements (2.a-g), and Working Capital Startup Costs (3) must reflect current costs as of the date of application and include all costs for construction and renovation. Explain the basis for construction cost estimates, renovation cost estimates, contingencies, interest during construction period, and inflation in an attachment to the application. See additional instruction in the column to the right of the table.

NOTE: Inflation should only be included in the Inflation allowance line A.1.e. The value of donated land for the project should be included on Line A.1.a as a use of funds and on line B.8 as a source of funds

	Hospital Building	Central Plant	Total
A. USE OF FUNDS			
1. CAPITAL COSTS			
a. New Construction			
(1) Building	$35,946,047	$0	$35,946,047
(2) Fixed Equipment	$0	$0	$0
(3) Site and Infrastructure	$246,346	$0	$246,346
(4) Architect/Engineering Fees	$4,628,765	$0	$4,628,765
(5) Permits & Inspections (Building, Utilities, Etc.)	$2,320,586	$0	$2,320,586
SUBTOTAL	**$43,141,744**	**$0**	**$43,141,744**
b. Renovations			
(1) Building	$652,076	$1,583,895	$2,235,971
(2) Fixed Equipment (not included in construction)	$0	$4,736,462	$4,736,462
(3) Architect/Engineering Fees	$80,228	$219,817	$300,045
(4) Permits (Building, Utilities, Etc.)	$38,204	$104,675	$142,879
SUBTOTAL	**$770,508**	**$6,644,849**	**$7,415,357**
c. Other Capital Costs			
(1) Movable Equipment	$2,520,000	$0	$2,520,000
(2) Owner Contingency Allowance	$4,511,181	$607,722	$5,118,903
(3) Gross interest during construction period	$6,566,503	$878,128	$7,444,631
(4) Technology / Information Systems	$2,000,000	$0	$2,000,000
(4) Furniture / Artwork / Signage	$1,340,790	$0	$1,340,790
(4) Escalation	$3,759,678	$549,670	$4,309,348
(4) Food Service Equipment	$300,000	$0	$300,000
(4) Other *(Specify/add rows if needed)*	$0	$0	$0
SUBTOTAL	***$20,998,152***	***$2,035,520***	**$23,033,672**
TOTAL CURRENT CAPITAL COSTS	**$64,910,404**	**$8,680,369**	**$73,590,773**
d. *Land Purchase*			
e. Inflation Allowance	$2,159,699	$288,813	$2,448,512
TOTAL CAPITAL COSTS	**$67,070,103**	**$8,969,183**	**$76,039,286**
2. Financing Cost and Other Cash Requirements			
a. Loan Placement Fees	**$626,233**	**$83,745**	$709,979
b. Bond Discount			$0
c. Legal Fees (CON)	**$110,322**		$110,322
d. Legal Fees (Other)	**$227,508**		$227,508
e. Non-Legal Consultant Fees (CON application related - specify what it is and why it is needed for the CON)	**$884,309**		$884,309
f. Non-Legal Consultant Fees (Other)	**$1,181,081**		$1,181,081
g. Liquidation of Existing Debt			$0
H. Debt Service Reserve Fund	**$4,634,551**	**$619,771**	$5,254,322
i. Other *(Specify/add rows if needed)*			$0
SUBTOTAL	***$7,664,005***	***$703,517***	**$8,367,521**
3. Working Capital Startup Costs			$0
TOTAL USES OF FUNDS	***$74,734,108***	***$9,672,699***	***$84,406,807***
B. Sources of Funds			
1. Cash			$0
2. Philanthropy (to date and expected)			$0
3. Authorized Bonds	$73,238,943	$9,479,183	$82,718,126
4. Interest Income from bond proceeds listed in #3	$1,495,164	$193,516	$1,688,681
5. Mortgage			$0
6. Working Capital Loans			$0
7. Grants or Appropriations			
a. Federal			$0
b. State			$0
c. Local			$0
8. Other *(Specify/add rows if needed)*			$0
TOTAL SOURCES OF FUNDS	***$74,734,108***	***$9,672,699***	**$84,406,807**
	Hospital Building	***Central Plant***	***Total***
Annual Lease Costs (if applicable)			
1. Land			$0
2. Building			$0
3. Major Movable Equipment			$0
4. Minor Movable Equipment			$0
5. Other *(Specify/add rows if needed)*			$0

* Describe the terms of the lease(s) below, including information on the fair market value of the item(s), and the number of years, annual cost, and the interest rate for the lease.

TABLE G. REVENUES & EXPENSES, UNINFLATED - UPPER CHESAPEAKE HEALTH SYSTI

INSTRUCTION: Complete this table for the entire facility, including the proposed project. Table H should reflect inflation. Projected revenues and expenses should be consistent with the projections in Table F. Indicate on the table if the reporting period is Calendar Year (CY) or Fiscal Year (FY). In an attachment to the application, provide an explanation or basis for the projections and specify all assumptions used. Applicants must explain why the assumptions are reasonable.

	Two Most Recent Years (Actual)		Current Year Projected	Projected Years (ending at least two years after project completion and full occupancy) Add columns if needed in order to document that the hospital will generate excess revenues over total expenses consistent with the Financial Feasibility standard.				
Indicate CY or FY	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**
1. REVENUE								
a. Gross patient services revenue	540,220	558,961	537,398	552,005	556,761	553,413	555,699	558,002
Gross Patient Service Revenues	***$ 540,220***	***$ 558,961***	***$ 537,398***	***$ 552,005***	***$ 556,761***	***$ 553,413***	***$ 555,699***	***$ 558,002***
c. Allowance For Bad Debt	14,027	14,080	14,227	14,663	14,701	14,130	14,199	14,268
d. Contractual Allowance	75,402	85,596	93,596	90,221	92,040	97,840	98,106	98,375
e. Charity Care	14,970	14,471	6,513	14,002	14,039	12,313	12,377	12,441
Net Patient Services Revenue	***$ 435,821***	***$ 444,814***	***$ 423,062***	***$ 433,119***	***$ 435,981***	***$ 429,129***	***$ 431,017***	***$ 432,918***
f. Other Operating Revenues (Specify/add row needed)	271	3,093	3,255	5,867	5,867	5,756	5,756	5,756
NET OPERATING REVENUE	***$ 436,092***	***$ 447,908***	***$ 426,317***	***$ 438,986***	***$ 441,848***	***$ 434,884***	***$ 436,772***	***$ 438,674***
2. EXPENSES								
a. Salaries & Wages (including benefits)	$ 244,970	$ 234,694	$ 245,975	262,625	$ 257,893	$ 252,291	$ 252,155	$ 252,707
b. Contractual Services	13,253	10,071	10,029	11,839	11,987	11,013	11,155	11,295
c. Interest on Current Debt	8,150	9,808	9,523	9,271	8,963	8,643	8,313	8,030
d. Interest on Project Debt	-	-	-	-	-	9,600	9,421	9,234
e. Current Depreciation	22,137	22,922	23,591	22,755	23,518	23,042	23,979	24,980
f. Project Depreciation	-	-	-	-	-	8,127	8,127	8,127
g. Current Amortization	-	-	-	-	-	-	-	-
h. Project Amortization	-	-	-	-	-	-	-	-
i. Supplies	83,351	84,045	64,830	65,492	67,218	66,250	67,149	68,074
j. Other Expenses (Specify/add rows if needed)	58,623	65,064	55,238	62,328	59,666	51,981	51,611	51,065
TOTAL OPERATING EXPENSES	***$ 430,484***	***$ 426,605***	***$ 409,186***	***$ 434,309***	***$ 429,246***	***$ 430,948***	***$ 431,911***	***$ 433,512***
3. INCOME								
a. Income From Operation	**$ 5,608**	**$ 21,303**	**$ 17,132**	**$ 4,677**	**$ 12,602**	**$ 3,937**	**$ 4,861**	**$ 5,162**
b. Non-Operating Income	18,640	17,578	10,085	8,180	7,273	8,299	8,563	8,982
SUBTOTAL	***$ 24,248***	***$ 38,881***	***$ 27,217***	***$ 12,858***	***$ 19,875***	***$ 12,235***	***$ 13,424***	***$ 14,143***
c. Income Taxes	-	-	-	-	-	-	-	-
NET INCOME (LOSS)	***$ 24,248***	***$ 38,881***	***$ 27,217***	***$ 12,858***	***$ 19,875***	***$ 12,235***	***$ 13,424***	***$ 14,143***

TABLE G. REVENUES & EXPENSES, UNINFLATED - UPPER CHESAPEAKE HEALTH SYSTI

INSTRUCTION: Complete this table for the entire facility, including the proposed project. Table H should reflect inflation. Projected revenues and expenses should be consistent with the projections in Table F. Indicate on the table if the reporting period is Calendar Year (CY) or Fiscal Year (FY). In an attachment to the application, provide an explanation or basis for the projections and specify all assumptions used. Applicants must explain why the assumptions are reasonable.

	Two Most Recent Years (Actual)		Current Year Projected	Projected Years (ending at least two years after project completion and full occupancy) Add columns if needed in order to document that the hospital will generate excess revenues over total expenses consistent with the Financial Feasibility standard.				
Indicate CY or FY	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**
4. PATIENT MIX								
a. Percent of Total Revenue								
1) Medicare	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%
2) Medicaid	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%
3) Blue Cross	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%
4) Commercial Insurance	25.4%	25.4%	25.4%	25.4%	25.4%	25.4%	25.4%	25.4%
5) Self-pay	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
6) Other	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
TOTAL	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***
b. Percent of Patient Day								
Total MSGA								
1) Medicare	63.4%	63.4%	63.4%	63.4%	63.4%	63.4%	63.4%	63.4%
2) Medicaid	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%
3) Blue Cross	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%
4) Commercial Insurance	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%
5) Self-pay	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
6) Other	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%
TOTAL	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***

Table G – Key Financial Projection Assumptions for UM Upper Chesapeake Health System (Excludes HSCRC Annual Update Factors & Expense Inflation)

Projection is based on the Upper Chesapeake Health System FY2019 cost center level projections and high level FY2020 budget, including Upper Chesapeake Medical Center, Harford Memorial Hospital, Upper Chesapeake Medical Services, Upper Chesapeake Health System (Parent entity) and several other entities with assumptions	
Projection period reflects FY2021 – FY2024	
Volumes	- Refer to COE Table F, including assumptions, and Need Assessment section of the application for volume methodology and assumptions
Patient Revenue	
• Gross Charges	
o Update Factor	- Based on each entity's FY2020 budget operating results.
o Demographic and Other Rate Adjustment	- Based on each entity's FY2020 budget operating results.
o Variable Cost Factor	- Based on each entity's FY2020 budget operating results.
• Revenue Deductions	
o Contractual Allowances	- Based on each entity's FY2020 budget operating results.
o Charity Care	- Based on each entity's FY2020 budget operating results.
o Allowance for Bad Debt	- Based on each entity's FY2020 budget operating results.
Other Revenue	- Based on each entity's FY2020 budget operating results.
Expenses	
• Inflation	- 0.0% increase per year
o Salaries and Benefits	- 0.0%
o Professional Fees	- 0.0%
o Supplies	- 0.0%
o Purchased Services	- 0.0%
o Other Operating Expenses	- 0.0%
• Expense Volume Driver	- For the hospital entities, identified at the cost center level and varies based on cost center level statistics and key volume drivers.
• Expense Variability with Volume Changes	
o Salaries and Benefits	- Ranges from 10% for overhead departments to 100% for inpatient nursing units
o Professional Fees	- 0% for all cost centers except inpatient nursing (50%) and Laboratory (100%)
o Supplies & Drugs	- Ranges from 0% for overhead departments to 100% for the Emergency Department
o Purchased Services	- Ranges from 0% for overhead departments to 50% for certain ancillary departments
o Other Operating Expenses	- Ranges from 0% for overhead departments to 50% for certain ancillary departments
• Other Operating Expenses	- Beginning in FY2019 and F2020, UCHS includes 340B savings (at UCMC) offset by the increased cost of the implementation of the following systems: electronic medical records (EPIC), human resource module (Lawson), and time and attendance system (Kronos), which leads to a transition to UMMS Shared Services beginning in FY2020. - Beginning in FY2021 a $0.9M performance improvement plan is assumed at UCMC, growing to $7.2M in FY2022 ($5.9M at UCMC, $0.2M at UCMS and $1.1M at AMC Specialty Psych Hospital) when HMH closes and the Project opens. An incremental performance improvement of $1.5M per year is assumed throughout the projection period.
• Interest Expense – Existing Debt	- Continued amortization of existing debt and related interest expense: - 5.76% interest on $55.3M 2008C Series bonds - 5.76% interest on $118.5M 2011 B&C Series bonds - 3.6% interest on $50.0M 2011A Series bonds
• Interest Expense – New Debt (Project Related)	- 4.5% interest on $214.4M bonds over 30 years
• Depreciation and Amortization	- Average life of 26 years on $196.3M (less land and debt service reserve fund) of construction project expenditures and 10 years on routine capital expenditures
Routine Capital Expenditures	- $135.0M in routine capital over the projection period with another $47.4M of other strategic capital projects (none are related to this Project)

TABLE H. REVENUES & EXPENSES, INFLATED - UPPER CHESAPEAKE HEALTH SYSTEM

INSTRUCTION: Complete this table for the entire facility, including the proposed project. Table G should reflect current dollars (no inflation). Projected revenues and expenses should be consistent with the projections in Table F and with the costs of Manpower listed in Table L. Manpower. Indicate on the table if the reporting period is Calendar Year (CY) or Fiscal Year (FY). In an attachment to the application, provide an explanation or basis for the projections and specify all assumptions used. Applicants must explain why the assumptions are reasonable. Specify the sources of non-operating income.

	Two Most Recent Years (Actual)		Current Year Projected	Projected Years (ending at least two years after project completion and full occupancy) Add columns if needed in order to document that the hospital will generate excess revenues over total expenses				
Indicate CY or FY	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**
1. GROSS REVENUE								
a. Gross Patient Service Revenues	$ 540,220	$ 558,961	$ 537,398	$ 565,253	$ 583,806	$ 594,222	$ 610,997	$ 628,254
Gross Patient Service Revenues	***540,220***	***$ 558,961***	***$ 537,398***	***$ 565,253***	***$ 583,806***	***$ 594,222***	***$ 610,997***	***$ 628,254***
b. Allowance For Bad Debt	$ 14,027	$ 14,080	$ 14,227	$ 15,015	$ 15,415	$ 15,172	$ 15,612	$ 16,064
c. Contractual Allowance	75,402	85,596	93,596	92,386	96,511	105,055	107,869	110,760
d. Charity Care	14,970	14,471	6,513	14,338	14,721	13,221	13,609	14,008
Net Patient Services Revenue	***435,821***	***$ 444,814***	***$ 423,062***	***$ 443,514***	***$ 457,159***	***$ 460,773***	***$ 473,908***	***$ 487,422***
e. Other Operating Revenues (Specify/add rows if needed)	271	3,093	3,255	5,926	5,985	5,930	5,989	6,049
NET OPERATING REVENUE	***436,092***	***$ 447,908***	***$ 426,317***	***$ 449,440***	***$ 463,144***	***$ 466,703***	***$ 479,897***	***$ 493,472***
2. EXPENSES								
a. Salaries & Wages (including benefits)	$ 244,970	$ 234,694	$ 245,975	$ 268,665	$ 269,892	$ 270,102	$ 276,166	$ 283,136
b. Contractual Services	13,253	10,071	10,029	12,194	12,717	12,034	12,555	13,094
c. Interest on Current Debt	8,150	9,808	9,523	9,271	8,963	8,643	8,313	8,030
d. Interest on Project Debt						9,600	9,421	9,234
e. Current Depreciation	22,137	22,922	23,591	22,755	23,518	23,042	23,979	24,980
f. Project Depreciation						8,127	8,127	8,127
g. Current Amortization								
h. Project Amortization								
i. Supplies	83,351	84,045	64,830	67,457	71,312	72,393	75,577	78,917
j. Other Expenses (Specify/add rows if needed)	58,623	65,064	55,238	63,575	62,077	55,163	55,866	56,380
TOTAL OPERATING EXPENSES	***$ 430,484***	***$ 426,605***	***$ 409,186***	***$ 443,916***	***$ 448,480***	***$ 459,105***	***$ 470,004***	***$ 481,898***
3. INCOME								
a. Income From Operation	**$ 5,608**	**$ 21,303**	**$ 17,132**	**$ 5,524**	**$ 14,664**	**$ 7,598**	**$ 9,893**	**$ 11,574**
b. Non-Operating Income	18,640	17,578	10,085	8,344	7,567	8,806	9,269	9,916
SUBTOTAL	***$ 24,248***	***$ 38,881***	***$ 27,217***	***$ 13,868***	***$ 22,231***	***$ 16,405***	***$ 19,162***	***$ 21,490***
c. Income Taxes	-	-	-	-	-	-	-	-
NET INCOME (LOSS)	***$ 24,248***	***$ 38,881***	***$ 27,217***	***$ 13,868***	***$ 22,231***	***$ 16,405***	***$ 19,162***	***$ 21,490***

TABLE H. REVENUES & EXPENSES, INFLATED - UPPER CHESAPEAKE HEALTH SYSTEM

INSTRUCTION: Complete this table for the entire facility, including the proposed project. Table G should reflect current dollars (no inflation). Projected revenues and expenses should be consistent with the projections in Table F and with the costs of Manpower listed in Table L. Manpower. Indicate on the table if the reporting period is Calendar Year (CY) or Fiscal Year (FY). In an attachment to the application, provide an explanation or basis for the projections and specify all assumptions used. Applicants must explain why the assumptions are reasonable. Specify the sources of non-operating income.

	Two Most Recent Years (Actual)		Current Year Projected	Projected Years (ending at least two years after project completion and full occupancy) Add columns if needed in order to document that the hospital will generate excess revenues over total expenses				
Indicate CY or FY	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**
4. PATIENT MIX								
a. Percent of Total Revenue								
1) Medicare	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%
2) Medicaid	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%
3) Blue Cross	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%
4) Commercial Insurance	25.4%	25.4%	25.4%	25.4%	25.4%	25.4%	25.4%	25.4%
5) Self-pay	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
6) Other	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
TOTAL	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***
b. Percent of Patient Days								
1) Medicare	63.4%	63.4%	63.4%	63.4%	63.4%	63.4%	63.4%	63.4%
2) Medicaid	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%
3) Blue Cross	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%
4) Commercial Insurance	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%
5) Self-pay	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
6) Other	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%
TOTAL	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***

Table H - Key Financial Projection Assumptions for UM Upper Chesapeake Health System (Includes HSCRC Annual Update Factors & Expense Inflation)

Projection is based on the Upper Chesapeake Health System FY2019 cost center level projections and high level FY2020 budget, including Upper Chesapeake Medical Center, Harford Memorial Hospital, Upper Chesapeake Medical Services, Upper Chesapeake Health System (Parent entity) and several other entities with assumptions identified below.

Projection period reflects FY2021 – FY2024

Volumes	- Refer to CON Table F, including assumptions, and Need Assessment section of the application for volume methodology and assumptions
Patient Revenue	
• Gross Charges	
o Update Factor	- Based on each entity's FY2020 budget operating results.
o Demographic and Other Rate Adjustment	- Based on each entity's FY2020 budget operating results.
o Variable Cost Factor	- Based on each entity's FY2020 budget operating results.
• Revenue Deductions	
o Contractual Allowances	- Based on each entity's FY2020 budget operating results.
o Charity Care	- Based on each entity's FY2020 budget operating results.
o Allowance for Bad Debt	- Based on each entity's FY2020 budget operating results.
Other Revenue	
Other Revenue	- Based on each entity's FY2020 budget operating results.
Expenses	
• Inflation	
o Salaries and Benefits	- 2.3%
o Professional Fees	- 3.0%
o Supplies	- 3.0%
o Purchased Services	- 3.0%
o Other Operating Expenses	- 2.0%
• Expense Volume Driver	- For the hospital entities, identified at the cost center level and varies based on cost center level statistics and key volume drivers.
• Expense Variability with Volume Changes	
o Salaries and Benefits	- Ranges from 10% for overhead departments to 100% for inpatient nursing units
o Professional Fees	- 0% for all cost centers except inpatient nursing (50%) and Laboratory (100%)
o Supplies & Drugs	- Ranges from 0% for overhead departments to 100% for the Emergency Department
o Purchased Services	- Ranges from 0% for overhead departments to 50% for certain ancillary departments
o Other Operating Expenses	- Ranges from 0% for overhead departments to 50% for certain ancillary departments
• Other Operating Expenses	- Beginning in FY2019 and F2020, UCHS includes 340B savings (at UCMC) offset by the increased cost of the implementation of the following systems: electronic medical records (EPIC), human resource module (Lawson), and time and attendance system (Kronos) which leads to a transition to UMMS Shared Services beginning in FY2020. - Beginning in FY2021 a $0.9M performance improvement plan is assumed at UCMC, growing to $7.2M in FY2022 ($5.9M at UCMC, $0.2M at UCMS and $1.1M at AMC Specialty Psych Hospital) when HMH closes and the Project opens. An incremental performance improvement of $1.5M per year is assumed throughout the projection period.
• Interest Expense – Existing Debt	- Continued amortization of existing debt and related interest expense: - 5.76% interest on $55.3M 2008C Series bonds - 5.76% interest on $118.5M 2011 B&C Series bonds - 3.6% interest on $50.0M 2011A Series bonds
• Interest Expense – Project Debt	- 4.5% interest on $214.4M bonds over 30 years
• Depreciation and Amortization	- Average life of 26 years on $196.3M (less land and debt service reserve fund) of construction project expenditures and 10 years on routine capital expenditures
Routine Capital Expenditures	- $135.0M in routine capital over the projection period with another $47.4M of other strategic capital projects (none are related to this Project)

TABLE J. REVENUES & EXPENSES, INFLATED - UCMC + UC FMF

INSTRUCTION: Complete this table for the entire facility, including the proposed project. Table H should reflect inflation. Projected revenues and expenses should be consistent with the projections in Table F. Indicate on the table if the reporting period is Calendar Year (CY) or Fiscal Year (FY). In an attachment to the application, provide an explanation or basis for the projections and specify all assumptions used. Applicants must explain why the assumptions are reasonable.

	Two Most Recent Years (Actual)		Current Year Projected	Projected Years (ending at least two years after project completion and full occupancy) Add columns if needed in order to document that the hospital will generate excess revenues over total expenses consistent with the Financial Feasibility standard.				
Indicate CY or FY	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**
1. REVENUE								
a. Inpatient Services	$ 138,399	$ 137,865	$ 133,667	$ 183,024	$ 201,829	$ 241,951	$ 246,947	$ 249,452
b. Outpatient Services	203,683	213,836	186,794	149,525	132,911	175,720	174,517	175,839
Gross Patient Service Revenues	***$ 342,082***	***$ 351,701***	***$ 320,461***	***$ 332,549***	***$ 334,740***	***$ 417,671***	***$ 421,464***	***$ 425,291***
c. Allowance For Bad Debt	9,525	9,336	8,850	9,411	9,473	13,314	13,435	13,556
d. Contractual Allowance	24,266	27,429	31,341	31,179	31,385	40,476	40,843	41,213
e. Charity Care	11,457	11,807	5,127	10,793	10,864	12,459	12,572	12,687
Net Patient Services Revenue	***$ 296,834***	***$ 303,129***	***$ 275,142***	***$ 281,166***	***$ 283,018***	***$ 351,422***	***$ 354,614***	***$ 357,835***
f. Other Operating Revenues (Specify/add rows if needed)	3,937	3,725	4,327	3,988	3,948	4,133	4,092	4,052
NET OPERATING REVENUE	***$ 300,771***	***$ 306,854***	***$ 279,469***	***$ 285,153***	***$ 286,966***	***$ 355,554***	***$ 358,706***	***$ 361,887***
2. EXPENSES								
a. Salaries & Wages (including benefits)	$ 140,964	$ 123,635	$ 128,391	$ 138,441	$ 133,955	$ 168,895	$ 168,998	$ 169,737
b. Contractual Services	10,016	10,588	10,932	11,903	11,903	14,611	14,611	14,611
c. Interest on Current Debt	6,901	8,816	8,404	8,182	7,911	8,201	7,888	7,619
d. Interest on Project Debt	-	-	-	-	-	6,590	6,467	6,338
e. Current Depreciation	16,311	17,452	18,204	18,060	19,017	21,876	22,717	23,508
f. Project Depreciation	-	-	-	-	-	5,637	5,672	5,779
g. Current Amortization	-	-	-	-	-	-	-	-
h. Project Amortization	-	-	-	-	-	-	-	-
i. Supplies	67,028	66,837	47,413	46,021	47,314	53,895	54,569	55,266
j. Other Expenses (Specify/add rows if needed)	42,999	44,932	35,203	43,325	40,371	51,772	51,439	51,047
TOTAL OPERATING EXPENSES	**$ 284,219**	**$ 272,260**	**$ 248,547**	**$ 265,930**	**$ 260,471**	**$ 331,476**	**$ 332,362**	**$ 333,907**
3. INCOME								
a. Income From Operation	**$ 16,552**	**$ 34,594**	**$ 30,923**	**$ 19,223**	**$ 26,495**	**$ 24,078**	**$ 26,344**	**$ 27,980**
b. Non-Operating Income	-	-	-	-	-	-	-	-
SUBTOTAL	***$ 16,552***	***$ 34,594***	***$ 30,923***	***$ 19,223***	***$ 26,495***	***$ 24,078***	***$ 26,344***	***$ 27,980***
c. Income Taxes	-	-	-	-	-	-	-	-
NET INCOME (LOSS)	***$ 16,552***	***$ 34,594***	***$ 30,923***	***$ 19,223***	***$ 26,495***	***$ 24,078***	***$ 26,344***	***$ 27,980***

TABLE J. REVENUES & EXPENSES, INFLATED - UCMC + UC FMF

INSTRUCTION: Complete this table for the entire facility, including the proposed project. Table H should reflect inflation. Projected revenues and expenses should be consistent with the projections in Table F. Indicate on the table if the reporting period is Calendar Year (CY) or Fiscal Year (FY). In an attachment to the application, provide an explanation or basis for the projections and specify all assumptions used. Applicants must explain why the assumptions are reasonable.

	Two Most Recent Years (Actual)		Current Year Projected	Projected Years (ending at least two years after project completion and full occupancy) Add columns if needed in order to document that the hospital will generate excess revenues over total expenses consistent with the Financial Feasibility standard.				
Indicate CY or FY	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**
4. PATIENT MIX								
a. Percent of Total Revenue								
1) Medicare	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%
2) Medicaid	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%
3) Blue Cross	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%
4) Commercial Insurance	25.4%	25.4%	25.4%	25.4%	25.4%	25.4%	25.4%	25.4%
5) Self-pay	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
6) Other	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
TOTAL	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***
b. Percent of Patient Days								
Total MSGA								
1) Medicare	63.4%	63.4%	63.4%	63.4%	63.4%	63.4%	63.4%	63.4%
2) Medicaid	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%
3) Blue Cross	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%
4) Commercial Insurance	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%
5) Self-pay	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
6) Other	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%
TOTAL	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***

Table J – Key Financial Projection Assumptions for the UM Upper Chesapeake Medical Center & Free Standing Medical Facility (Excludes HSCRC Annual Update Factors & Expense Inflation)

Projection is based on the Upper Chesapeake Medical Center (UCMC) and Harford Memorial Hospital (HMH) FY2019 cost center level projections and high level FY2020 budget results with assumptions identified below	
Projection period reflects FY2021 – FY2024	
Volumes	- Refer to COE Table F, including assumptions, and Need Assessment section of the application for volume methodology and assumptions
Patient Revenue	
• Gross Charges	
o Update Factor	- 0.00% annual increase
o Demographic and Other Rate Adjustment	- Remains constant at 0.43% per year
o Variable Cost Factor	- UC HMH volume shifting at 100% VCF before the addition of retained revenue for capital
o Other (FMF)	- Removed assessments and quality from HMH rates and changed the mark-up based on HMH FY2018 OP PDA payer mix and actual FY2018 UCC
• Revenue Deductions (UCMC)	
o Contractual Allowances	- Remains constant at 9.4% of gross revenue per year
o Charity Care	- Remains constant at 3.2% of gross revenue per year with no overfunding or underfunding of UCC
o Allowance for Bad Debt	- Remains constant at 2.8% of gross revenue per year with no overfunding or underfunding of UCC
• Revenue Deductions (FMF)	
o Contractual Allowances	- Based on FY2018 HMH actual contractual allowances for HMH Behavioral Health, ED, and Observation Services and remains constant at 8.9% of gross revenue per year
o Charity Care	- Based on FY2018 actual charity care for HMH Behavioral Health, ED, and Observation Services and remains constant at 4.4% of gross revenue per year - No overfunding or underfunding of UCC
o Allowance for Bad Debt	- Based on FY2018 actual bad debt for HMH Behavioral Health, ED, and Observation services and remains constant at 7.2% of gross revenue per year - No overfunding or underfunding of UCC
Other Revenue	
o Cafeteria Revenue and Other Operating Revenue	- 0.0% increase per year
Expenses	
• Inflation	- 0.0% weighted average annual increase that reflects the following:
o Salaries and Benefits	- 0.0%
o Professional Fees	- 0.0%
o Supplies	- 0.0%
o Purchased Services	- 0.0%
o Other Operating Expenses	- 0.0%
• Expense Volume Driver	- Identified at the cost center level and varies based on cost center level statistics and key volume drivers.
• Expense Variability with Volume Changes	
o Salaries and Benefits	- Ranges from 10% for overhead departments to 100% for inpatient nursing units
o Professional Fees	- 0% for all cost centers except inpatient nursing (50%) and Laboratory (100%)
o Supplies & Drugs	- Ranges from 0% for overhead departments to 100% for the Emergency Department
o Purchased Services	- Ranges from 0% for overhead departments to 50% for certain ancillary departments
o Other Operating Expenses	- Ranges from 0% for overhead departments to 50% for certain ancillary departments
• Other Operating Expenses	- Beginning in FY2019 and FY2020, includes 340B savings (at UCMC) offset by the increased cost of the implementation of the following systems: electronic medical records (EPIC), human resource module (Lawson), and time and attendance system (Kronos), which leads to a transition to UMMS Shared Services beginning in FY2020. - Beginning in FY2021, a performance improvement plan is included at UCMC totaling $0.9M, growing to $5.9M in FY2022 when HMH closes and the Project opens. An incremental performance improvement of $1.1M per year is assumed throughout the projection period
• Interest Expense – Existing Debt	- 95% allocation of the following UCHS debt: - 5.76% interest on $55.3M 2008C Series bonds - 5.76% interest on $118.5M 2011 B&C Series bonds - 3.6% interest on $50.0M 2011A Series bonds
• Interest Expense – Project Debt (UCMC)	- 4.5% interest on $82.9M bonds over 30 years
• Interest Expense – Project Debt (FMF)	- 4.5% interest on $64.3M bonds over 30 years
• Depreciation and Amortization (UCMC)	- Average life of 26 years on $73.5M of construction project (less debt service reserve fund) expenditures and 10 years on routine capital expenditures
• Depreciation and Amortization (FMF)	- Average life of 26 years on $51.9M of construction project (less land and debt service reserve fund) expenditures and 10 years on routine capital expenditures
Routine Capital Expenditures (UCMC)	- $108.8M in routine capital over the projection period with another $47.4M of other strategic capital projects (none are related to this Project)
Routine Capital Expenditures (FMF)	- $0.3M in FY2022, growing to $1.1M in FY2023 and $1.8M in FY2024

TABLE K. REVENUES & EXPENSES, INFLATED - UCMC + UC FMF

INSTRUCTION: Complete this table for the entire facility, including the proposed project. Table H should reflect inflation. Projected revenues and expenses should be consistent with the projections in Table F. Indicate on the table if the reporting period is Calendar Year (CY) or Fiscal Year (FY). In an attachment to the application, provide an explanation or basis for the projections and specify all assumptions used. Applicants must explain why the assumptions are reasonable.

	Two Most Recent Years (Actual)		Current Year Projected	Projected Years (ending at least two years after project completion and full occupancy) Add columns if needed in order to document that the hospital will generate excess revenues over total expenses consistent with the Financial Feasibility standard.				
Indicate CY or FY	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**
1. REVENUE								
a. Inpatient Services	$ 138,399	$ 137,865	$ 133,667	$ 186,685	$ 209,983	$ 256,761	$ 267,304	$ 275,416
b. Outpatient Services	203,683	213,836	186,794	152,516	138,281	186,475	188,902	194,140
Gross Patient Service Revenues	***$ 342,082***	***$ 351,701***	***$ 320,461***	***$ 339,200***	***$ 348,264***	***$ 443,236***	***$ 456,206***	***$ 469,556***
c. Allowance For Bad Debt	9,525	9,336	8,850	9,600	9,856	14,129	14,542	14,967
d. Contractual Allowance	24,266	27,429	31,341	31,803	32,653	42,954	44,210	45,503
e. Charity Care	11,457	11,807	5,127	11,009	11,303	13,221	13,609	14,008
Net Patient Services Revenue	***$ 296,834***	***$ 303,129***	***$ 275,142***	***$ 286,789***	***$ 294,452***	***$ 372,932***	***$ 383,845***	***$ 395,079***
f. Other Operating Revenues (Specify/add rows if needed)	3,937	3,725	4,327	4,067	4,108	4,386	4,429	4,474
NET OPERATING REVENUE	***$ 300,771***	***$ 306,854***	***$ 279,469***	***$ 290,856***	***$ 298,560***	***$ 377,317***	***$ 388,275***	***$ 399,552***
2. EXPENSES								
a. Salaries & Wages (including benefits)	$ 140,964	$ 123,635	$ 128,391	$ 141,625	$ 140,188	$ 180,819	$ 185,091	$ 190,176
b. Contractual Services	10,016	10,588	10,932	12,260	12,628	15,966	16,445	16,938
c. Interest on Current Debt	6,901	8,816	8,404	8,182	7,911	8,201	7,888	7,619
d. Interest on Project Debt	-	-	-	-	-	6,590	6,467	6,338
e. Current Depreciation	16,311	17,452	18,204	18,060	19,017	21,876	22,717	23,508
f. Project Depreciation	-	-	-	-	-	5,637	5,672	5,779
g. Current Amortization	-	-	-	-	-	-	-	-
h. Project Amortization	-	-	-	-	-	-	-	-
i. Supplies	67,028	66,837	47,413	47,401	50,195	58,893	61,418	64,069
j. Other Expenses (Specify/add rows if needed)	42,999	44,932	35,203	44,191	42,002	54,941	55,680	56,360
TOTAL OPERATING EXPENSES	***$ 284,219***	***$ 272,260***	***$ 248,547***	***$ 271,718***	***$ 271,941***	***$ 352,922***	***$ 361,377***	***$ 370,788***
3. INCOME								
a. Income From Operation	**$ 16,552**	**$ 34,594**	**$ 30,923**	**$ 19,138**	**$ 26,619**	**$ 24,396**	**$ 26,898**	**$ 28,764**
b. Non-Operating Income	-	-	-	-	-	-	-	-
SUBTOTAL	***$ 16,552***	***$ 34,594***	***$ 30,923***	***$ 19,138***	***$ 26,619***	***$ 24,396***	***$ 26,898***	***$ 28,764***
c. Income Taxes	-	-	-	-	-	-	-	-
NET INCOME (LOSS)	***$ 16,552***	***$ 34,594***	***$ 30,923***	***$ 19,138***	***$ 26,619***	***$ 24,396***	***$ 26,898***	***$ 28,764***

TABLE K. REVENUES & EXPENSES, INFLATED - UCMC + UC FMF

INSTRUCTION: Complete this table for the entire facility, including the proposed project. Table H should reflect inflation. Projected revenues and expenses should be consistent with the projections in Table F. Indicate on the table if the reporting period is Calendar Year (CY) or Fiscal Year (FY). In an attachment to the application, provide an explanation or basis for the projections and specify all assumptions used. Applicants must explain why the assumptions are reasonable.

	Two Most Recent Years (Actual)		Current Year Projected	Projected Years (ending at least two years after project completion and full occupancy) Add columns if needed in order to document that the hospital will generate excess revenues over total expenses consistent with the Financial Feasibility standard.				
Indicate CY or FY	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**
4. PATIENT MIX								
a. Percent of Total Revenue								
1) Medicare	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%
2) Medicaid	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%
3) Blue Cross	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%
4) Commercial Insurance	25.4%	25.4%	25.4%	25.4%	25.4%	25.4%	25.4%	25.4%
5) Self-pay	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
6) Other	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
TOTAL	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***
b. Percent of Patient Days								
Total MSGA								
1) Medicare	63.4%	63.4%	63.4%	63.4%	63.4%	63.4%	63.4%	63.4%
2) Medicaid	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%
3) Blue Cross	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%
4) Commercial Insurance	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%	16.3%
5) Self-pay	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
6) Other	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%
TOTAL	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***	***100.0%***

Table K – Key Financial Projection Assumptions for the UM Upper Chesapeake Medical Center & Free Standing Medical Facility (Includes HSCRC Annual Update Factors & Expense Inflation)

Projection is based on the Upper Chesapeake Medical Center (UCMC) and Harford Memorial Hospital (HMH) FY2019 cost center level projections and high level FY2020 budge results with assumptions identified below.	
Projection period reflects FY2021 – FY2024	
Volumes	- Refer to COE Table F, including assumptions, and Need Assessment section of the application for volume methodology and assumptions
Patient Revenue	
• Gross Charges	
o Update Factor	- 2.1% annual increase in FY2021, 2.3% annual increase in FY2022 and 2.50% annual increase in FY2023 & FY2024
o Demographic and Other Rate Adjustment	- Remains constant at 0.43% per year
o Variable Cost Factor	- UC FMF volume shifting at 100% VCF before the addition of retained revenue for capital
o Other (FMF)	- Removed assessments and quality from HMH rates and changed the mark-up based on HMH FY2018 OP PDA payer mix and actual FY2018 UCC
• Revenue Deductions (UCMC)	
o Contractual Allowances	- Remains constant at 9.4% of gross revenue per yea
o Charity Care	- Remains constant at 3.2% of gross revenue per year with no overfunding or underfunding of UCC
o Allowance for Bad Debt	- Remains constant at 2.8% of gross revenue per year with no overfunding or underfunding of UCC
• Revenue Deductions (FMF)	
o Contractual Allowances	- Based on FY2018 HMH actual contractual allowances for HMH Behavioral Health, ED, and Observation Service and remains constant at 8.9% of gross revenue per year
o Charity Care	- Based on FY2018 actual charity care for HMH Behavioral Health, ED, and Observation Services and remains constant at 4.4% of gross revenue per year - No overfunding or underfunding of UCC
o Allowance for Bad Debt	- Based on FY2018 actual bad debt for HMH Behavioral Health, ED, and Observation services and remains constant at 7.2% of gross revenue per year - No overfunding or underfunding of UCC
Other Revenue	
o Cafeteria Revenue and Other Operating	- 1.0% increase per year
Expenses	
• Inflation	
o Salaries and Benefits	- 2.3%
o Professional Fees	- 3.0%
o Supplies	- 3.0%
o Purchased Services	- 3.0%
o Other Operating Expenses	- 2.0%
• Expense Volume Driver	- Identified at the cost center level and varies based on cost center level statistics and key volume drivers.
• Expense Variability with Volume Changes	
o Salaries and Benefits	- Ranges from 10% for overhead departments to 100% for inpatient nursing units
o Professional Fees	- 0% for all cost centers except inpatient nursing (50%) and Laboratory (100%)
o Supplies & Drugs	- Ranges from 0% for overhead departments to 100% for the Emergency Department
o Purchased Services	- Ranges from 0% for overhead departments to 50% for certain ancillary departments
o Other Operating Expenses	- Ranges from 0% for overhead departments to 50% for certain ancillary departments
• Other Operating Expenses	- Beginning in FY2019 and FY2020, includes 340B savings (at UCMC) offset by the increased cost of the implementation of the following systems: electronic medical records (EPIC), human resource module (Lawson), and time and attendance system (Kronos), which leads to a transition to UMMS Shared Services beginning in FY2020. - Beginning in FY2021, a performance improvement plan is included at UCMC totaling $0.9M, growing to $5.9M in FY2022 when HMH closes and the Project opens. An incremental performance improvement of $1.1M per year is assumed throughout the projection period
• Interest Expense – Existing Debt	- 95% allocation of the following UCHS debt - 5.76% interest on $55.3M 2008C Series bonds - 5.76% interest on $118.5M 2011 B&C Series bonds - 3.6% interest on $50.0M 2011A Series bonds
• Interest Expense – Project Debt (UCMC)	- 4.5% interest on $82.9M bonds over 30 years
• Interest Expense – Project Debt (FMF)	- 4.5% interest on $64.3M bonds over 30 years
• Depreciation and Amortization (UCMC)	- Average life of 26 years on $73.5M of construction project (less debt service reserve fund) expenditures and 1(years on routine capital expenditures
• Depreciation and Amortization (FMF)	- Average life of 26 years on $51.9M of construction project (less land and debt service reserve fund) expenditures and 10 years on routine capital expenditures
Routine Capital Expenditures (UCMC)	- $108.8M in routine capital over the projection period with another $47.4M of other strategic capital projects (none are related to this Project)
Routine Capital Expenditures (FMF)	- $0.3M in FY2022, growing to $1.1M in FY2023 and $1.8M in FY2024

TABLE E. PROJECT BUDGET

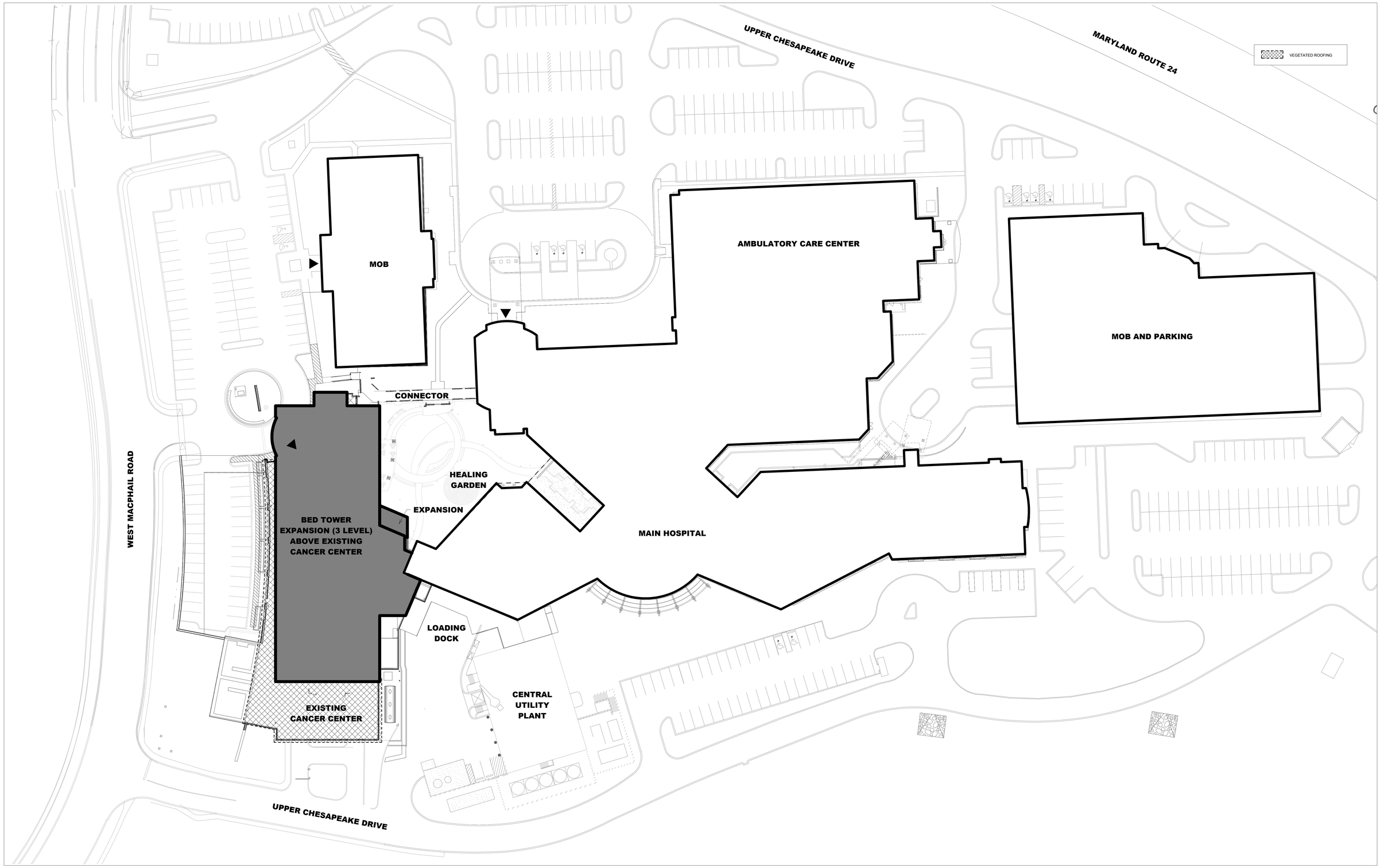
INSTRUCTION: Estimates for Capital Costs (1.a-e), Financing Costs and Other Cash Requirements (2.a-g), and Working Capital Startup Costs (3) must reflect current costs as of the date of application and include all costs for construction and renovation. Explain the basis for construction cost estimates, renovation cost estimates, contingencies, interest during construction period, and inflation in an attachment to the application. See additional instruction in the column to the right of the table.

NOTE: Inflation should only be included in the Inflation allowance line A.1.e. The value of donated land for the project should be included on Line A.1.a as a use of funds and on line B.8 as a source of funds

	Hospital Building	Central Plant	Total
A. USE OF FUNDS			
1. CAPITAL COSTS			
a. New Construction			
(1) Building	$35,946,047	$0	$35,946,047
(2) Fixed Equipment	$0	$0	$0
(3) Site and Infrastructure	$246,346	$0	$246,346
(4) Architect/Engineering Fees	$4,628,765	$0	$4,628,765
(5) Permits & Inspections (Building, Utilities, Etc.)	$2,320,586	$0	$2,320,586
SUBTOTAL	**$43,141,744**	**$0**	**$43,141,744**
b. Renovations			
(1) Building	$652,076	$1,583,895	$2,235,971
(2) Fixed Equipment (not included in construction)	$0	$4,736,462	$4,736,462
(3) Architect/Engineering Fees	$80,228	$219,817	$300,045
(4) Permits (Building, Utilities, Etc.)	$38,204	$104,675	$142,879
SUBTOTAL	**$770,508**	**$6,644,849**	**$7,415,357**
c. Other Capital Costs			
(1) Movable Equipment	$2,520,000	$0	$2,520,000
(2) Owner Contingency Allowance	$4,511,181	$607,722	$5,118,903
(3) Gross interest during construction period	$6,566,503	$878,128	$7,444,631
(4) Technology / Information Systems	$2,000,000	$0	$2,000,000
(4) Furniture / Artwork / Signage	$1,340,790	$0	$1,340,790
(4) Escalation	$3,759,678	$549,670	$4,309,348
(4) Food Service Equipment	$300,000	$0	$300,000
(4) Other *(Specify/add rows if needed)*	$0	$0	$0
SUBTOTAL	***$20,998,152***	***$2,035,520***	**$23,033,672**
TOTAL CURRENT CAPITAL COSTS	**$64,910,404**	**$8,680,369**	**$73,590,773**
d. *Land Purchase*			
e. Inflation Allowance	$2,159,699	$288,813	$2,448,512
TOTAL CAPITAL COSTS	**$67,070,103**	**$8,969,183**	**$76,039,286**
2. Financing Cost and Other Cash Requirements			
a. Loan Placement Fees	**$626,233**	**$83,745**	$709,979
b. Bond Discount			$0
c. Legal Fees (CON)	**$110,322**		$110,322
d. Legal Fees (Other)	**$227,508**		$227,508
e. Non-Legal Consultant Fees (CON application related - specify what it is and why it is needed for the CON)	**$884,309**		$884,309
f. Non-Legal Consultant Fees (Other)	**$1,181,081**		$1,181,081
g. Liquidation of Existing Debt			$0
H. Debt Service Reserve Fund	**$4,634,551**	**$619,771**	$5,254,322
i. Other *(Specify/add rows if needed)*			$0
SUBTOTAL	***$7,664,005***	***$703,517***	**$8,367,521**
3. Working Capital Startup Costs			$0
TOTAL USES OF FUNDS	***$74,734,108***	***$9,672,699***	***$84,406,807***
B. Sources of Funds			
1. Cash			$0
2. Philanthropy (to date and expected)			$0
3. Authorized Bonds	$73,238,943	$9,479,183	$82,718,126
4. Interest Income from bond proceeds listed in #3	$1,495,164	$193,516	$1,688,681
5. Mortgage			$0
6. Working Capital Loans			$0
7. Grants or Appropriations			
a. Federal			$0
b. State			$0
c. Local			$0
8. Other *(Specify/add rows if needed)*			$0
TOTAL SOURCES OF FUNDS	***$74,734,108***	***$9,672,699***	**$84,406,807**
	Hospital Building	***Central Plant***	***Total***
Annual Lease Costs (if applicable)			
1. Land			$0
2. Building			$0
3. Major Movable Equipment			$0
4. Minor Movable Equipment			$0
5. Other *(Specify/add rows if needed)*			$0

* Describe the terms of the lease(s) below, including information on the fair market value of the item(s), and the number of years, annual cost, and the interest rate for the lease.

EXHIBIT 2



UCMC BED EXPANSION

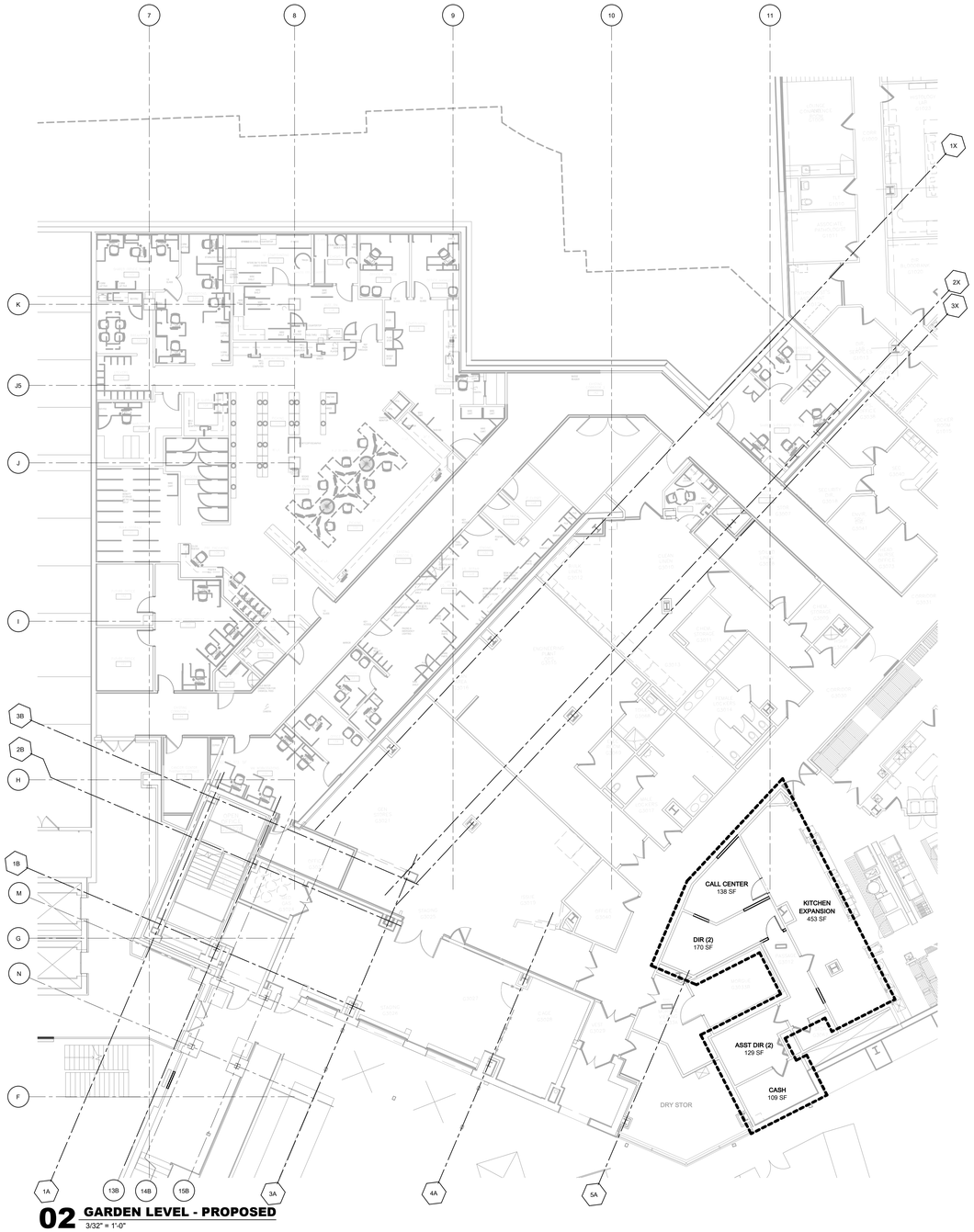
BEL AIR, MARYLAND

SITE PLAN - PROPOSED

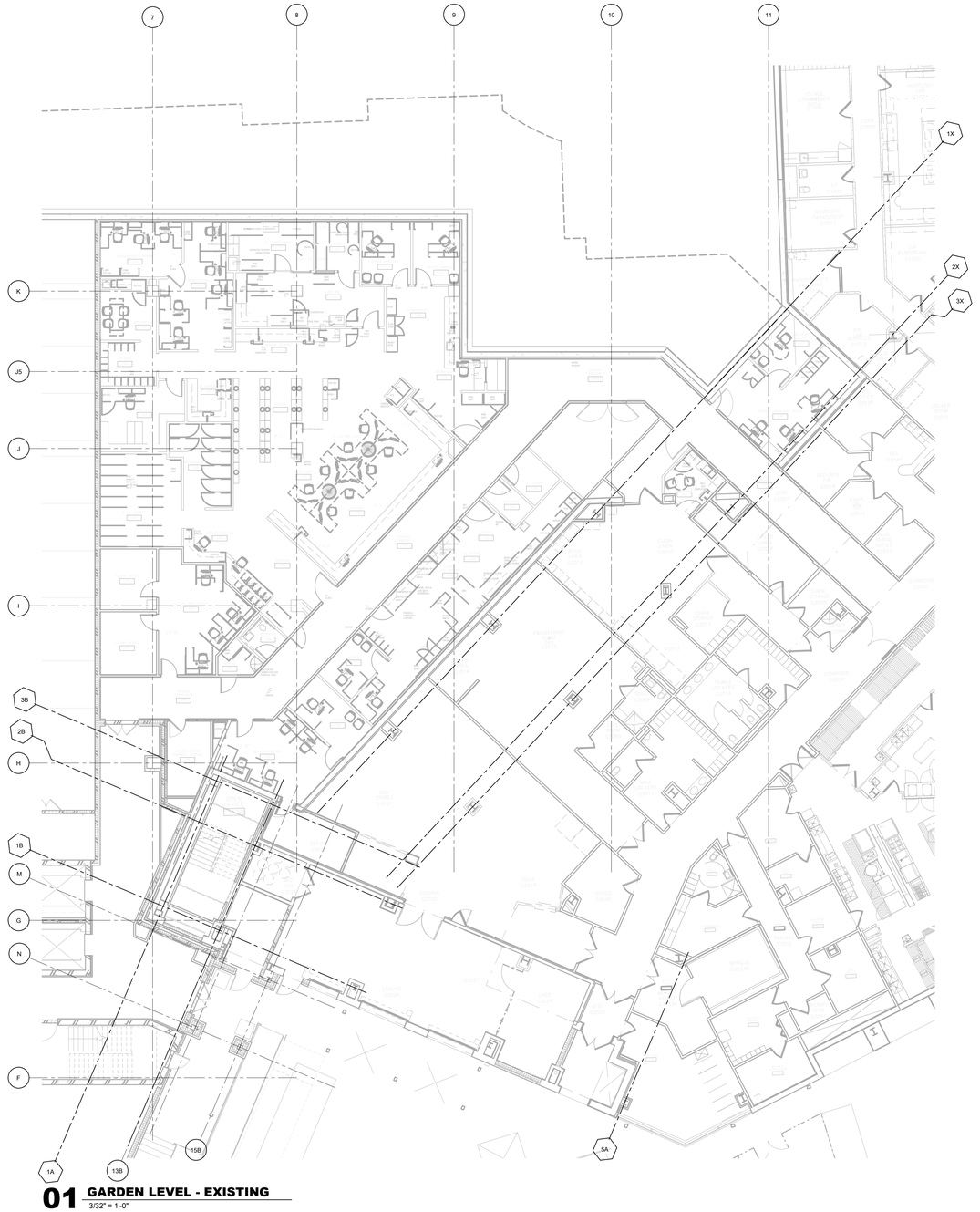
0 16 32 64FT

A0-01 MAY 17, 2017 18931.006

HKS



02 GARDEN LEVEL - PROPOSED
3/32" = 1'-0"



01 GARDEN LEVEL - EXISTING
3/32" = 1'-0"

UCMC BED EXPANSION

BEL AIR, MARYLAND

GARDEN LEVEL - DIETARY EXPANSION

A2-00 MAY 17, 2017 18931.006

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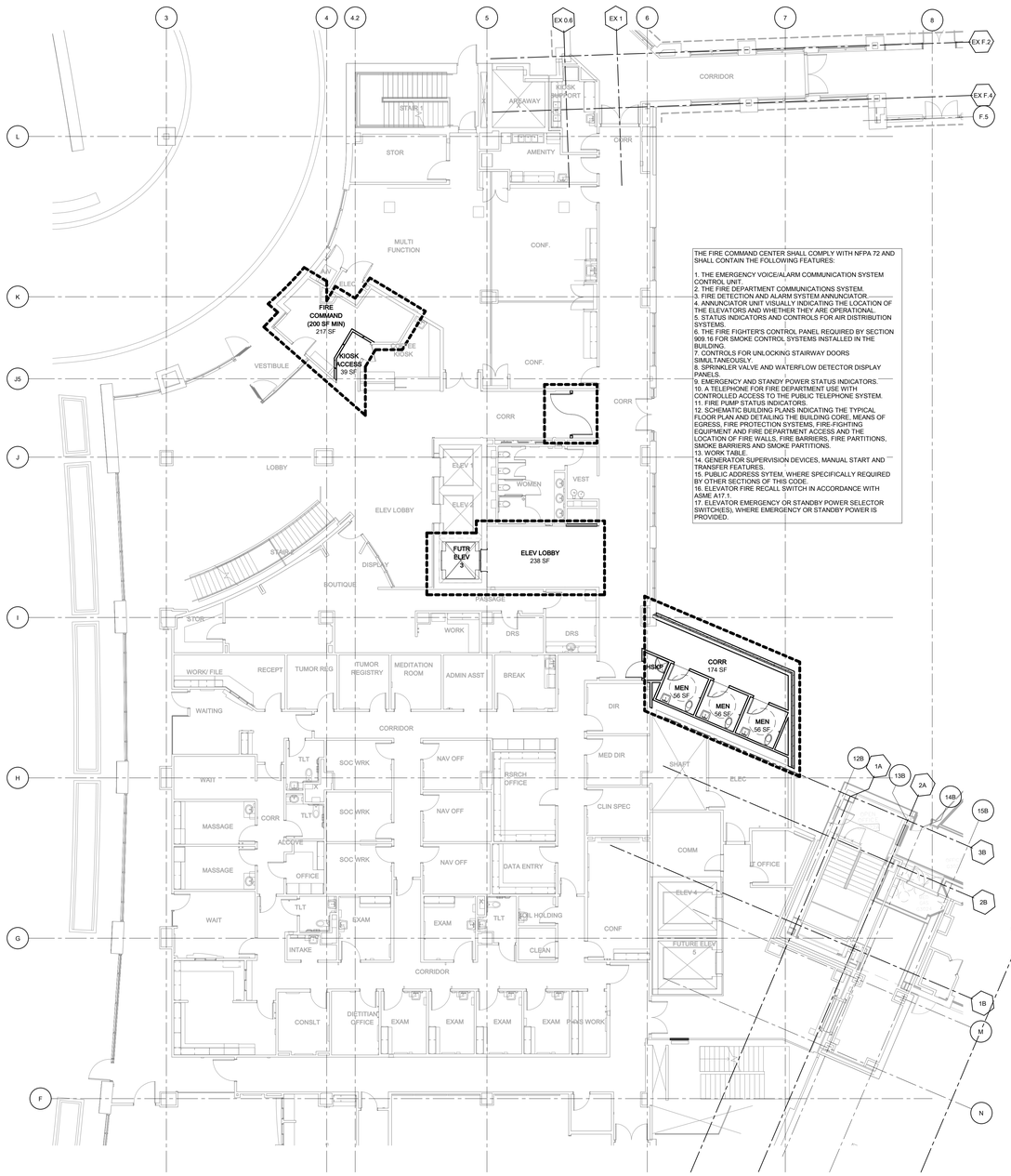
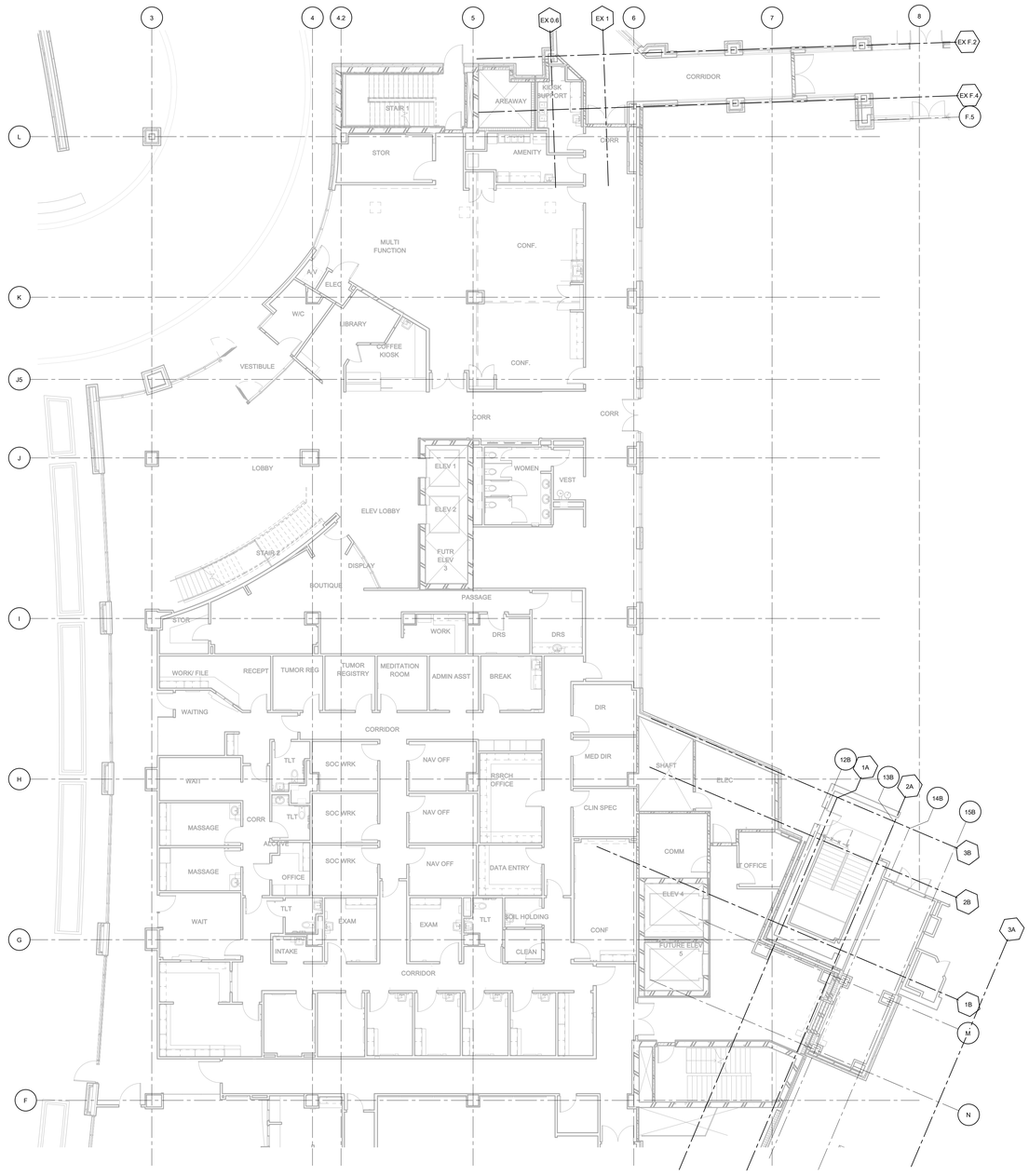


THE FIRE COMMAND CENTER SHALL COMPLY WITH NFPA 72 AND SHALL CONTAIN THE FOLLOWING FEATURES:

1. THE EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM CONTROL UNIT.
2. THE FIRE DEPARTMENT COMMUNICATIONS SYSTEM.
3. FIRE DETECTION AND ALARM SYSTEM ANNUNCIATOR.
4. ANNUNCIATOR UNIT VISUALLY INDICATING THE LOCATION OF THE ELEVATORS AND WHETHER THEY ARE OPERATIONAL.
5. STATUS INDICATORS AND CONTROLS FOR AIR DISTRIBUTION SYSTEMS.
6. THE FIRE FIGHTER'S CONTROL PANEL REQUIRED BY SECTION 909.16 FOR SMOKE CONTROL SYSTEMS INSTALLED IN THE BUILDING.
7. CONTROLS FOR UNLOCKING STAIRWAY DOORS SIMULTANEOUSLY.
8. SPRINKLER VALVE AND WATERFLOW DETECTOR DISPLAY PANELS.
9. EMERGENCY AND STANDY POWER STATUS INDICATORS.
10. A TELEPHONE FOR FIRE DEPARTMENT USE WITH CONTROLLED ACCESS TO THE PUBLIC TELEPHONE SYSTEM.
11. FIRE PUMP STATUS INDICATORS.
12. SCHEMATIC BUILDING PLANS INDICATING THE TYPICAL FLOOR PLAN AND DETAILING THE BUILDING CORE, MEANS OF EGRESS, FIRE PROTECTION SYSTEMS, FIRE-FIGHTING EQUIPMENT AND FIRE DEPARTMENT ACCESS AND THE LOCATION OF FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS AND SMOKE PARTITIONS.
13. WORK TABLE.
14. GENERATOR SUPERVISION DEVICES, MANUAL START AND TRANSFER FEATURES.
15. PUBLIC ADDRESS SYTEM, WHERE SPECIFICALLY REQUIRED BY OTHER SECTIONS OF THIS CODE.
16. ELEVATOR FIRE RECALL SWITCH IN ACCORDANCE WITH ASME A17.1.
17. ELEVATOR EMERGENCY OR STANDBY POWER SELECTOR SWITCH(ES), WHERE EMERGENCY OR STANDBY POWER IS PROVIDED.

02 **LEVEL ONE - PROPOSED**
3/32" = 1'-0"



01 **LEVEL ONE - EXISTING**
3/32" = 1'-0"

LEVEL 01 - FIRE COMMAND CENTER / PATIENT ELEVATOR ACCESS

UCMC BED EXPANSION

BEL AIR, MARYLAND

A2-01 MAY 17, 2017 18931.006

HKS

02 **LEVEL TWO - PROPOSED**
3/32" = 1'-0"

01 **LEVEL TWO - EXISTING**
3/32" = 1'-0"

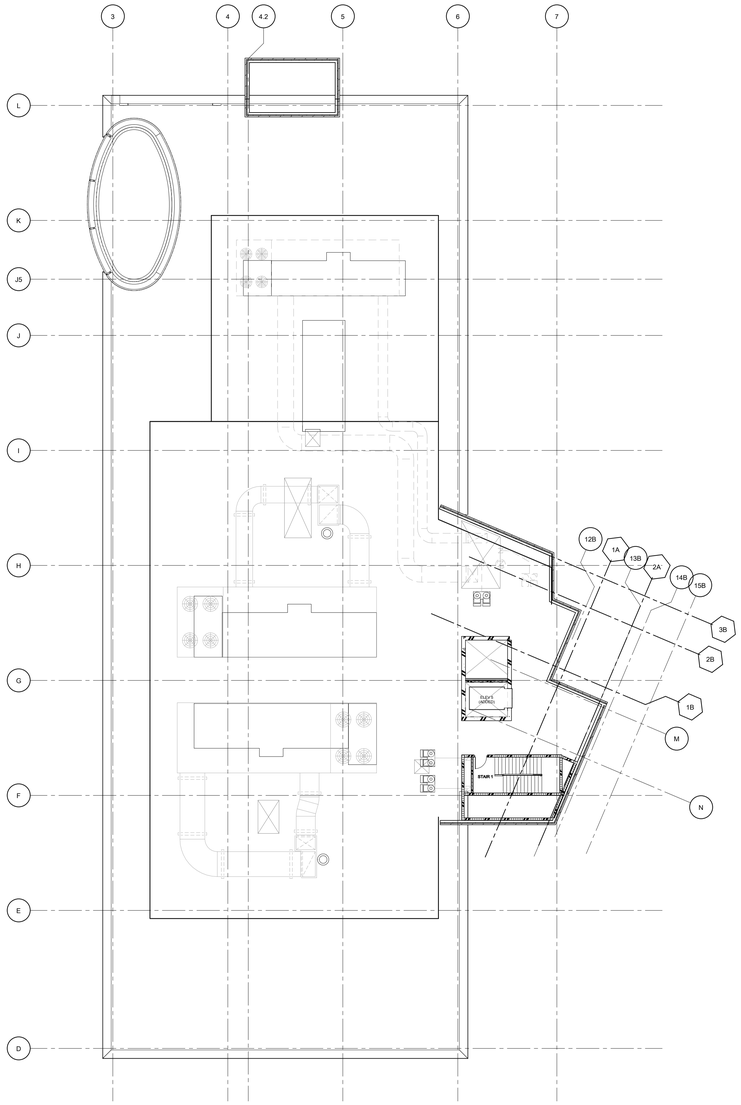
LEVEL 02 - PUBLIC ELEVATOR ACCESS

UCMC BED EXPANSION

BEL AIR, MARYLAND

A2-02 MAY 17, 2017 18931.006

HKS



02 **ROOF LEVEL PLAN - PROPOSED**
1/16" = 1'-0"

01 **ROOF LEVEL PLAN - EXISTING (AT LEVEL THREE)**
1/16" = 1'-0"

UCMC BED EXPANSION

BEL AIR, MARYLAND

ROOF LEVEL

0 8 16 32FT

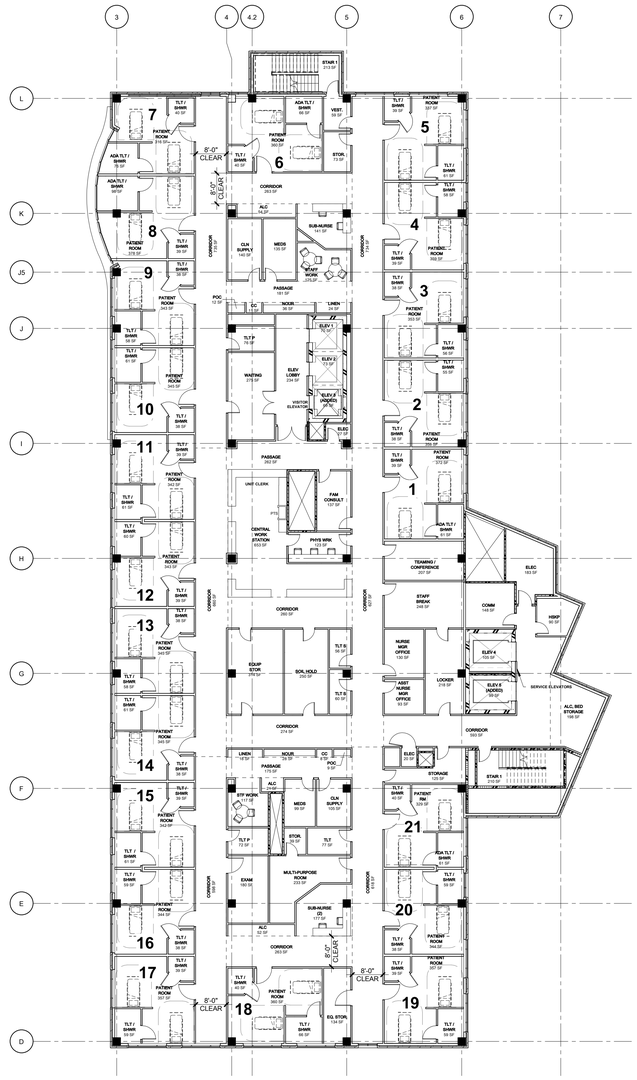
A2-04 MAY 17, 2017 18931.006

HKS

LEVEL 05 - BED FLOOR

1/16" = 1'-0"

30 PRIVATE INPATIENT ROOMS
30 TOTAL INPATIENT BEDS



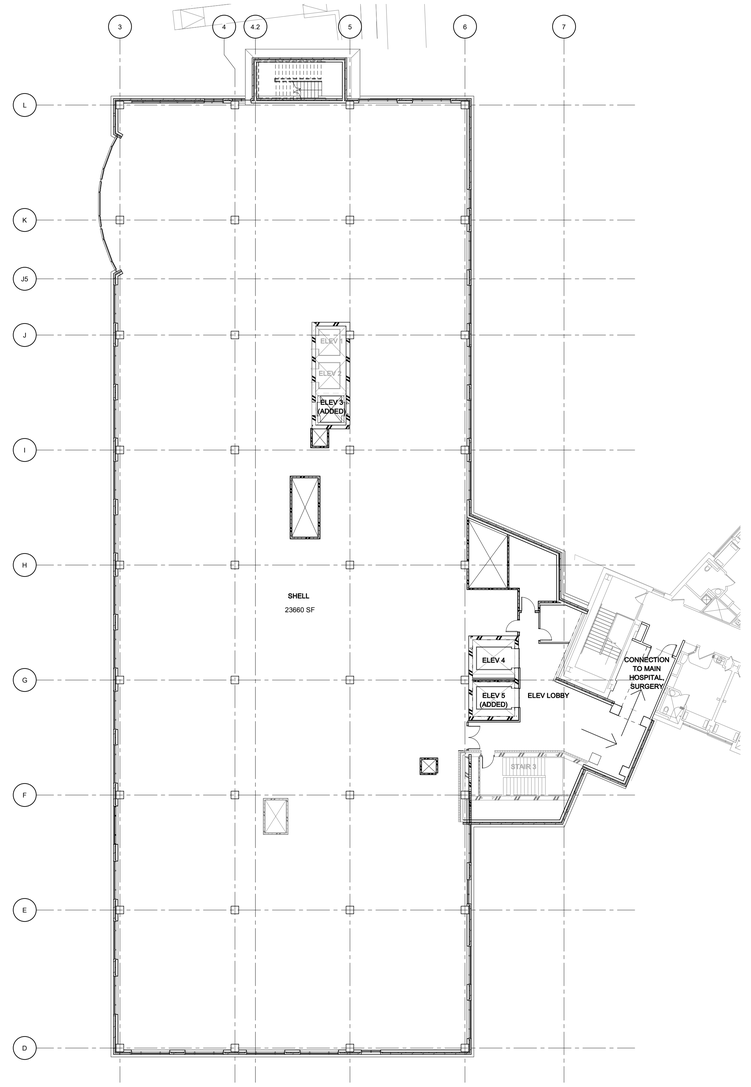
LEVEL 04 - BED FLOOR

1/16" = 1'-0"

21 SEMI-PRIVATE OBSERVATION ROOMS
42 TOTAL OBSERVATION BEDS

BED COUNT:

LEVEL 4 = 42 OBSERVATION BEDS
LEVEL 5 = 30 INPATIENT BEDS



LEVEL 03 - SHELL FLOOR

1/16" = 1'-0"

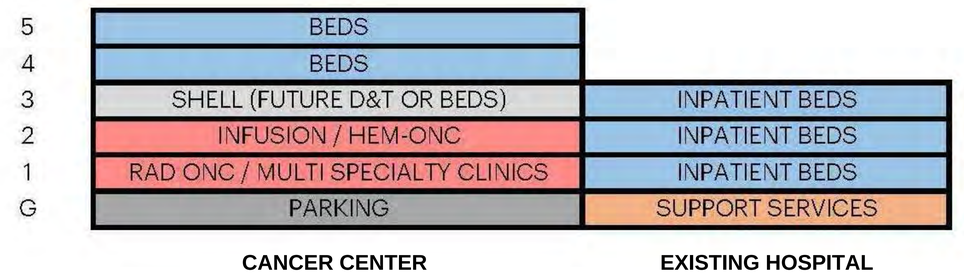
UCMC BED EXPANSION

BEL AIR, MARYLAND

A2-03
LEVELS 03 - 05

AUGUST 24, 2019 18931.000

HKS



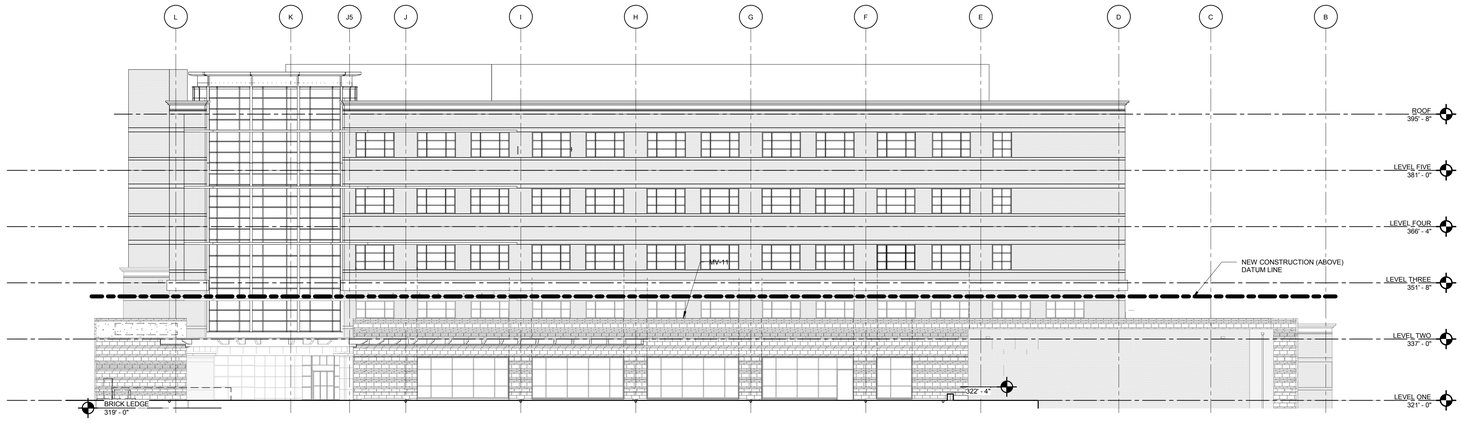
01 STACKING DIAGRAM
NTS

STACKING DIAGRAMS

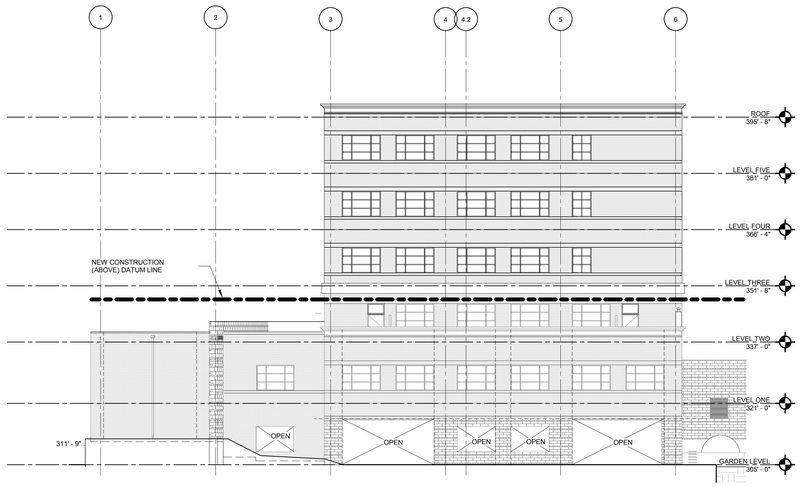
UCMC BED EXPANSION

BEL AIR, MARYLAND

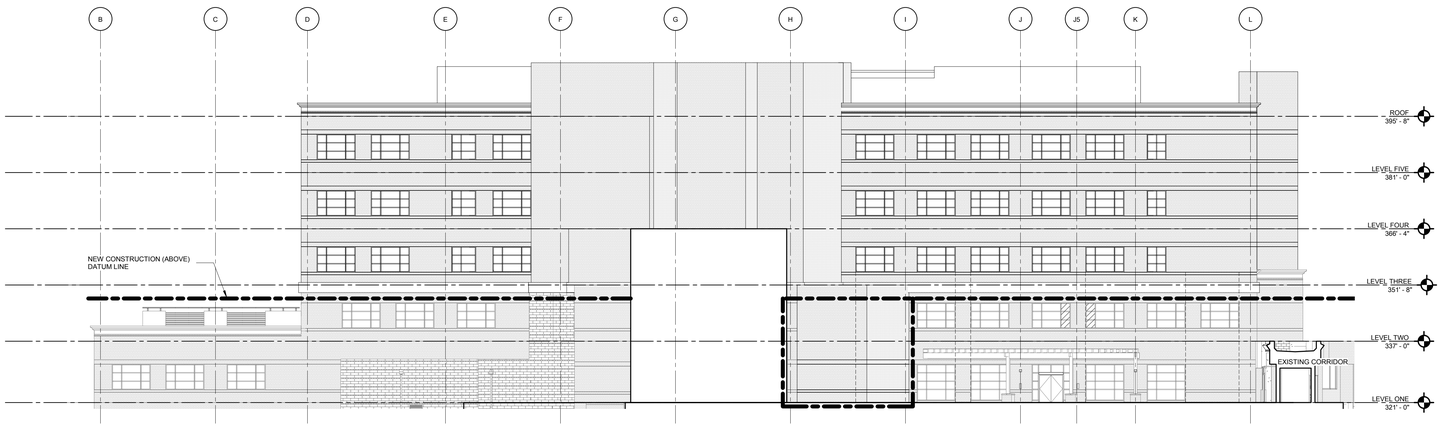
HKS



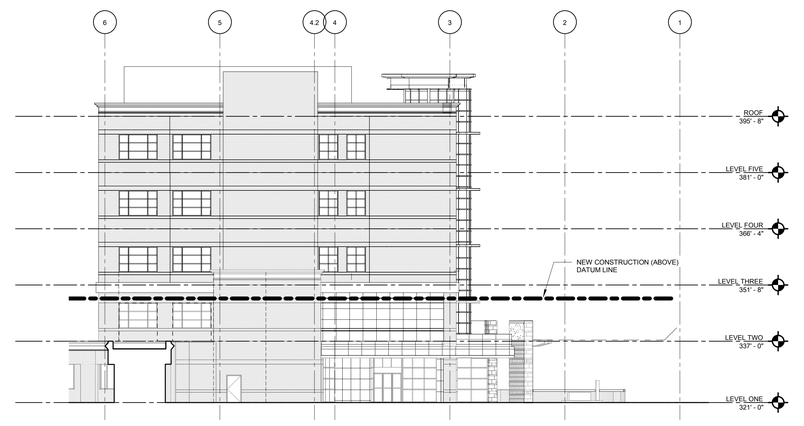
04 WEST ELEVATION
1/16" = 1'-0"



03 SOUTH ELEVATION
1/16" = 1'-0"



02 EAST ELEVATION
1/16" = 1'-0"



01 NORTH ELEVATION
1/16" = 1'-0"

UCMC BED EXPANSION

BEL AIR, MARYLAND

ELEVATIONS

0 8 16 32FT

A2-06 MAY 17, 2017 18931.006

HKS

PERSPECTIVE VIEW - ENTRANCE

UCMC BED EXPANSION

BEL AIR, MARYLAND

A2-07 MAY 17, 2017 18931.006

HKS

PERSPECTIVE VIEW - NORTH VIEW

UCMC BED EXPANSION

BEL AIR, MARYLAND

HKS

PERSPECTIVE VIEW - AERIAL VIEW

UCMC BED EXPANSION

BEL AIR, MARYLAND

A2-09 MAY 17, 2017 18931.006

HKS

EXHIBIT 3

Upper Chesapeake Health

Subject: Estimate of Charges

Origin Date: 1/7/11

Approved by: _____

Craig Willig, Vice President of Finance

To provide for transparency in health care pricing

Policy

Upper Chesapeake Health (UCH) shall publicly disclose, on a continuous basis, price estimates for such items, products, services, or procedures in accordance with current Legislation.

Manner of Disclosure

- Shall be made in an open and conspicuous manner;
- Shall be made available at the point of service, in print, and on the Internet; and
- UCH provides estimated charges for the most commonly used inpatient, outpatient, and ancillary services. The information is reviewed semi-annually by the Director of Reimbursement and updated when appropriate.

The amounts are estimates of charges for hospital procedures and services only.

Procedures

UCH promptly responds to individual requests for current charges for specific services/procedures.

- Patients seeking estimates of procedures/services that are not listed on the UCH Common Procedure chart will be encouraged to call the Cashier (443-643-1663).
- The UM Upper Chesapeake Health website will include a listing of current rates for common services; to be updated semi-annually
- If the Cashier is unable to provide the estimate, the Director of Reimbursement will be consulted.
- An estimate will be provided within three business days of receiving the request.

All Patient Accounting, Patient Access, Guest Services, and Administrative Personnel are knowledgeable of the process for providing estimates of charges.

DEVELOPER:

Patient Access, UCH

Reviewed / Revised: 7/1/17

ORIGIN DATE: 1/2011

NEXT REVIEW DATE: 7/2018

EXHIBIT 4

UNIVERSITY of MARYLAND
UPPER CHESAPEAKE HEALTH

Upper Chesapeake Health

Subject: Financial Assistance Policy

Effective Date: 10/2018

Approved by: _____

Steve Witman, Sr. VP CFO

_____

Board of Directors

To provide financial relief to patients unable to meet their financial obligation to University of Maryland Upper Chesapeake Health.

1. **Policy**
    a. This policy applies to the University of Maryland Upper Chesapeake Health (UM UCH) facilities to include:
        i. University of Maryland Upper Chesapeake Medical Center
        ii. University of Maryland Harford Memorial Hospital.

    UM UCH is committed to providing financial assistance to persons who have health care needs and are uninsured, underinsured, ineligible for a government program, or otherwise unable to pay, for all medically necessary care will be covered based on their individual financial situation.

    b. It is the policy of UM UCH to provide Financial Assistance (FA) based on indigence or high medical expenses (Medical Financial Hardship program) for patients who meet specified financial criteria and request such assistance. The purpose of the following policy statement is to describe how applications for FA should be made, the criteria for eligibility, and the steps for processing applications.

    c. UM UCH will post notices of availability at appropriate intake locations as well as the Patient Accounting Office. Notice of availability will also be sent to patients on patient bills. A Patient Billing and Financial Assistance Information Sheet will be provided before discharge and will be available to all patients upon request and without charge, both by mail and in the emergency room and admission areas. A written estimate of total charges, excluding the emergency department, will be available to all

patients upon request. This policy, the Patient Billing and Financial Information Sheet, and the Financial Assistance Application will also be conspicuously posted on the UM UCH website (https://www.umms.org/uch/patients-visitors/for-patients/financial-assistance).

d. FA may be extended when a review of a patient's individual financial circumstances has been conducted and documented. This may include a review of the patient's existing medical expenses and obligations, including any accounts having gone to bad debt.
e. Payments made for care received during the financial assistance eligibility window that exceed the patients determined responsibility will be refunded if that amount exceeds $5.00
    i. Collector notes, and any other relevant information, are deliberated as part of the final refund decision; in general refunds are issued based on when the patient was determined unable to pay compared to when the payments were made
    ii. Patients documented as uncooperative within 30 days after initiation of a financial assistance application are ineligible for a refund
f. UM UCH retains the right in its sole discretion to determine a patient's ability to pay. All patients presenting for emergency services or diagnosed-cancer care will be treated regardless of their ability to pay, except as noted under 2. d. iv. below.

2. Program Eligibility

a. Consistent with our mission to deliver compassionate and high quality healthcare services and to advocate for those who do not have the means to pay for medically necessary care, UM UCH strives to ensure that the financial capacity of people who need health care services does not prevent them from seeking or receiving care. To further the UM UCH commitment to our mission to provide healthcare to the surrounding community, UM UCH reserves the right to grant financial assistance without formal application being made by our patients.
b. Specific exclusions to coverage under the Financial Assistance Program:
    i. Physician charges are excluded from UM UCH's FA policy. Patients who wish to pursue FA for physician related bills must contact the physician directly. For a list of physicians providing emergency and other medically necessary care in the hospital facility, whose services are not covered under this policy, please contact our Financial Assistance Department at (443) 843-5092.

ii. Generally, the FA program is not available to cover services that are 100% denied by a patient's insurance company; however, exceptions may be made on a case by case basis considering medical and programmatic implications
iii. Cosmetic or other non-medically necessary services

c. Patients may become ineligible for FA for the following reasons:
   i. Have insurance coverage through an HMO, PPO, Workers Compensation, Medicaid, Motor Vehicle or other insurance programs that deny access to UM UCH due to insurance plan restrictions/limits
   ii. Refusal to be screened for other assistance programs prior to submitting an application to the FA program
d. Determination for Financial Assistance eligibility will be based on assets, income, and family size. Please note the following:
   i. Liquid assets greater than $15,000 for individuals, and $25,000 for families will disqualify the patient for 100% assistance.
   ii. Equity of $150,000 in a primary residence will be excluded from the calculation for determination of financial assistance; and
   iii. Retirement assets, regardless of balance, to which the IRS has granted preferential tax treatment as a retirement account, including but not limited to, deferred compensation plans qualified under the IRS code or nonqualified deferred compensation plans will not be used for determination of financial assistance.
   iv. Non-citizens/non-residents of the United States may only qualify for Financial Assistance under these circumstances: 1. an initial visit for emergency care or 2. if qualified for presumptive Medical Assistance upon inpatient admission or prior to outpatient treatments for cancer care, and only after a determination by the Financial Counselor/Director of Patient Accounting and/or V.P. of Finance. See the Upper Chesapeake Health Self Pay Billing policy for criteria for beginning outpatient cancer care for these patients.
e. Patients who indicate they are unemployed and have no insurance coverage shall be required to submit a FA application unless they meet Presumptive FA (see section 3 below) eligibility criteria. If a patient qualifies for COBRA coverage, the patient's financial ability to pay COBRA insurance premiums shall be reviewed by the Financial Counselor and recommendations shall be made to Senior Leadership. Individuals with the financial capacity to purchase health insurance shall be encouraged to do so, as a means of assuring access to health care services and for their overall personal health.

f. Free medically necessary care will be awarded to patients with family income at or below 200 percent of the Federal Poverty Level (FPL).
g. Reduced-cost, medically necessary care will be awarded to low-income patients with family income between 200 and 300 percent of the FPL
h. If a patient requests the application be reconsidered after a denial determination made by the Financial Counselor, the Director of Patient Accounting will review the application for final determination.
i. Payment plans can be offered for all self-pay balances by our Self Pay Vendor.

3. **Presumptive Financial Assistance**
   a. Patients may also be considered for Presumptive Financial Assistance eligibility with proof of enrollment in one of the programs listed below. There are instances when a patient may appear eligible for FA, but there is no FA form on file. Often there is adequate information provided by the patient or through other sources, which could provide sufficient evidence to provide the patent with FA. In the event there is no evidence to support a patient's eligibility for FA, UM UCH reserves the right to use outside agencies or information in determining estimated income amounts for the basis of determining financial assistance eligibility and potential reduced care rates. Once determined, due to the inherent nature of presumptive circumstances, the only financial assistance that can be granted is a 100-percent write-off of the account balance. Presumptive FA eligibility shall only cover the patient's specific date of service. Presumptive eligibility may be determined on the basis of individual life circumstances that may include:
      i. Active Medical Assistance pharmacy coverage
      ii. Special Low Income Medicare Beneficiary (SLMB) coverage (covers Medicare Part B premiums)
      iii. Homelessness
      iv. Medical Assistance and Medicaid Managed Care patients for services provided in the ED beyond coverage of these programs
      v. Maryland Public Health System Emergency Petition (EP) patients (balance after insurance)
      vi. Participation in Women, Infants and Children Program (WIC)
      vii. Supplemental Nutritional Assistance Program (SNAP)
      viii. Eligibility for other state or local assistance programs
      ix. Deceased with no known estate
      x. Determined to meet eligibility criteria established under former State Only Medical Assistance Program

xi. Households with children in the free or reduced lunch program
xii. Low-income household Energy Assistance Program
xiii. Self-Administered Drugs (in the outpatient environment only)
xiv. Medical Assistance Spenddown amounts

b. Specific services or criteria that are ineligible for Presumptive FA include:
   i. Uninsured patients seen in the ED under EP will not be considered under the presumptive FA program until the Maryland Medicaid Psych program has been billed

4. Procedures

a. The Financial Counselor will complete an eligibility check with the Medicaid program to verify whether the patient has current coverage
b. The Financial Counselor will consult via phone or meet with patients who request FA to determine if they meet preliminary criteria for assistance.
   i. To facilitate this process each applicant must provide information about family size and income. To help applicants complete the process, we will provide an application that will let them know what paperwork is required for a final determination of eligibility
   ii. All applications will be tracked and after eligibility is determined, a letter of final determination will be submitted to the patient
   iii. Patients will have fifteen days to submit required documentation to be considered for eligibility. The patient may re-apply to the program and initiate a new case if the original timeline is not adhered to. For any episode of care, the financial assistance application process will be open up to at least 240 days after the first post-discharge patient bill for the care is sent.
c. There will be one application process for UM UCH. The patient is required to provide a completed FA application. In addition, the following may be required:
   i. A copy of their most recent Federal Income Tax Return (if married and filing separately, then also a copy of spouse's tax return)
   ii. Proof of disability income (if applicable)
   iii. A copy of their three most recent pay stubs (if employed) or other evidence of income of any other person whose income is considered part of the family income
   iv. A Medical Assistance Notice of Determination (if applicable)
   v. Proof of U.S. citizenship or lawful permanent residence status (green card)
   vi. Reasonable proof of other declared expenses may be taken in to consideration

vii. If unemployed, reasonable proof of unemployment such as statement from the Office of Unemployment Insurance, a statement from current source of financial support, etc.
viii. A Verification of No Income Letter (if there is no evidence of income)
ix. Three most recent bank statements

Written request for missing information will be sent to the patient. Where appropriate, oral submission of needed information will be accepted.

d. In addition to qualifying for Financial Assistance based on income, a patient can qualify for FA either through lack of sufficient income, insurance or catastrophic medical expenses based on the Financial Hardship criteria discussed below. Within two (2) business days following a patient's request for Financial Assistance, application for Medical Assistance, or both, the hospital will make a determination of probable eligibility. Completed applications will be forwarded to the Manager of Patient Accounting who will determine approval for adjustments up to $10,000. Adjustments of $10,000 or greater will be forwarded to the Director of Patient Financial Services and the V.P. of Finance for an additional approval.
e. Once a patient is approved for FA, FA coverage is effective for:
    i. All accounts in an AR (Accounts Receivable) status
    ii. All accounts in a BD (Bad Debt) status that were transferred within one year of the service date of the oldest AR account being adjusted using the current application
    iii. All future visits within 6 months of the application date
    iv. In addition, coverage will also extend to any account for which a written notice described in paragraph h (below) has not been sent or for which the deadline stated therein has not elapsed. However, UM UCH may decide to extend the FA eligibility period further into the past or the future.
f. Social Security beneficiaries with lifelong disabilities may become eligible for FA indefinitely and may not need to reapply
g. UM UCH does not report debts owed to credit reporting agencies.
h. In rare cases, accounts may warrant Extraordinary Collection Actions (ECAs). Once an account has met the following criteria, the account is closed by the collection agency as "uncollectible" and forwarded back to Patient Accounting for review to establish grounds for legal action. UM UCH reserves the right to place a lien on a patient's income, residence and/or automobile. This only occurs after all efforts to resolve the debt have been exhausted.

Criteria:

i. The debt is valid
ii. The account is equal to or greater than 120 days old
iii. Patient refuses to acknowledge the debt
iv. Upon review and investigation, we have determined liquid assets are available (checking, savings, stocks, bonds or money market accounts)
v. The VP of Finance must authorize legal action

Action will be preceded by notice 30 days prior to commencement. Availability of financial assistance will be communicated to the patient and a presumptive eligibility review will occur prior to any ECA action being taken. This written notice will indicate that Financial Assistance is available for eligible individuals, identify the ECAs that the hospital (or its collection agency, attorney or other authorized party) intends to initiate to obtain payment for the care, and state a deadline after which such ECAs may be initiated. It will also include a Patient Billing and Financial Assistance Information Sheet. In addition, the hospital will make reasonable efforts to orally communicate the availability of Financial Assistance to the patient and tell the patient how he or she may obtain assistance with the application process.

5. Financial Hardship

a. The following guidelines are outlined as a separate, supplemental determination of Financial Assistance, known as Financial Hardship. Financial Hardship will be offered to all patients who apply for FA and are determined to be eligible. Medical Financial Hardship is available for patients who otherwise do not qualify for Financial Assistance under the primary guidelines of this policy.
b. Financial Hardship Assistance is defined as facility charges incurred at UM UCH owned hospitals or physician practices for medically necessary treatment by a family household that exceeds 25% of the family's annual income. The Financial Assistance reduction will be the balance that exceeds the 25% of the family's annual income. Family annual income must be less than 500% of the Federal Poverty Limit
c. Once a patient is approved for Financial Hardship Assistance, coverage may be effective starting with the first qualifying date of service and the following twelve (12) months
d. Financial Hardship Assistance may cover the patient and the immediate family members living in the same household. Each family member may

be approved for the reduced cost and eligibility period for medically necessary treatment.

e. Coverage will not apply to elective or cosmetic procedures.
f. In order to continue in the program after the expiration of an eligibility period, each patient (family member) must reapply to be considered.
g. Patients who have been approved for the program should inform UM UCH of any changes in income, assets, expenses or family (household) status within 30 days of such changes. Patients determined to be eligible for Financial Hardship Assistance and granted an eligibility period extending into the future will be notified about how to apply for more generous assistance during such eligibility period.
h. All other eligibility, ineligibility and procedures for the primary Financial Assistance program criteria apply for the Financial Hardship Assistance, unless otherwise stated
i. See Attachment A for the sliding scale reduced cost of care.

6. Amounts Generally Billed

a. An individual who is eligible for assistance under this policy for emergency or other medically necessary care will never be charged more than the amounts generally billed (AGB) to an individual who is not eligible for assistance. The charges to which a discount will apply are set by the State of Maryland's rate regulation agency (HSCRC) and are the same for all payers (i.e. commercial insurers, Medicare, Medicaid or self-pay).

Reviewed / Revised: 10/2018

ORIGIN DATE: 10/2010

NEXT REVIEW DATE: 10/2019

2/1/2019

% discount	MAX/MIN	Family 1	Family 2	Family 3	Family 4	Family 5	Family 6	Family 7	Family 8
Fed Pov Guideline		$12,490.00	$16,910.00	$21,330.00	$25,750.00	$30,170.00	$34,590.00	$39,010.00	$43,430.00
MHA Guidelines now at 200% of FPL									
100%	up to	$ 24,980.00	$ 33,820.00	$ 42,660.00	$ 51,500.00	$ 60,340.00	$ 69,180.00	$ 78,020.00	$ 86,860.00
90%	Min	$ 24,981.00	$ 33,821.00	$ 42,661.00	$ 51,501.00	$ 60,341.00	$ 69,181.00	$ 78,021.00	$ 86,861.00
	Max	$ 27,478.00	$ 37,202.00	$ 46,926.00	$ 56,650.00	$ 66,374.00	$ 76,098.00	$ 85,822.00	$ 95,546.00
80%	Min	$ 27,479.00	$ 37,203.00	$ 46,927.00	$ 56,651.00	$ 66,375.00	$ 76,099.00	$ 85,823.00	$ 95,547.00
	Max	$ 28,727.00	$ 38,893.00	$ 49,059.00	$ 59,225.00	$ 69,391.00	$ 79,557.00	$ 89,723.00	$ 99,889.00
70%	Min	$ 28,728.00	$ 38,894.00	$ 49,060.00	$ 59,226.00	$ 69,392.00	$ 79,558.00	$ 89,724.00	$ 99,890.00
	Max	$ 29,976.00	$ 40,584.00	$ 51,192.00	$ 61,800.00	$ 72,408.00	$ 83,016.00	$ 93,624.00	$ 104,232.00
60%	Min	$ 29,977.00	$ 40,585.00	$ 51,193.00	$ 61,801.00	$ 72,409.00	$ 83,017.00	$ 93,625.00	$ 104,233.00
	Max	$ 31,225.00	$ 42,275.00	$ 53,325.00	$ 64,375.00	$ 75,425.00	$ 86,475.00	$ 97,525.00	$ 108,575.00
50%	Min	$ 31,226.00	$ 42,276.00	$ 53,326.00	$ 64,376.00	$ 75,426.00	$ 86,476.00	$ 97,526.00	$ 108,576.00
	Max	$ 32,474.00	$ 43,966.00	$ 55,458.00	$ 66,950.00	$ 78,442.00	$ 89,934.00	$ 101,426.00	$ 112,918.00
40%	Min	$ 32,475.00	$ 43,967.00	$ 55,459.00	$ 66,951.00	$ 78,443.00	$ 89,935.00	$ 101,427.00	$ 112,919.00
	Max	$ 33,723.00	$ 45,657.00	$ 57,591.00	$ 69,525.00	$ 81,459.00	$ 93,393.00	$ 105,327.00	$ 117,261.00
30%	Min	$ 33,724.00	$ 45,658.00	$ 57,592.00	$ 69,526.00	$ 81,460.00	$ 93,394.00	$ 105,328.00	$ 117,262.00
	Max	$ 34,972.00	$ 47,348.00	$ 59,724.00	$ 72,100.00	$ 84,476.00	$ 96,852.00	$ 109,228.00	$ 121,604.00
20%	Min	$ 34,973.00	$ 47,349.00	$ 59,725.00	$ 72,101.00	$ 84,477.00	$ 96,853.00	$ 109,229.00	$ 121,605.00
	Max	$ 36,221.00	$ 49,039.00	$ 61,857.00	$ 74,675.00	$ 87,493.00	$ 100,311.00	$ 113,129.00	$ 125,947.00
10%	Min	$ 36,222.00	$ 49,040.00	$ 61,858.00	$ 74,676.00	$ 87,494.00	$ 100,312.00	$ 113,130.00	$ 125,948.00
	Max	$ 37,470.00	$ 50,730.00	$ 63,990.00	$ 77,250.00	$ 90,510.00	$ 103,770.00	$ 117,030.00	$ 130,290.00

UNIVERSITY of MARYLAND
UPPER CHESAPEAKE HEALTH

UM Upper Chesapeake Health has a Financial Assistance Program based on financial need.

Please complete and return the attached form and required documents within 15 days.

This information will be held in the strictest confidence and is necessary to determine eligibility.

Within two (2) business days of receipt of the Financial Assistance Request, the hospital will make a determination of probable eligibility.

Thank you for choosing **UM Upper Chesapeake Health**

We would like to assist you with the **Financial Assistance** process. Please complete the attached form and return it to us **within 15 days** with the requested information from the list below. This information will be held in the strictest confidence and is necessary to determine eligibility. Within two (2) business days of receipt of the Financial Assistance Request, the hospital will make a determination of probable eligibility. If you are unable to provide this information within that time frame, please contact:

Financial Counselor
(443) 843-5092

In order for you to qualify for **Financial Assistance**, we are required to obtain the completed and signed application along with the following:

- **Copies of all pages of your last three (3) bank statements**
  - Must be copies of original bank statements showing bank's name and all account holders' names
  - Need copies for applicant and spouse
  - If there are deposits other than payroll, please provide an explanation
- **Copies of your last three (3) pay stubs**
  - Need copies for applicant and spouse
- **Copies of all pages of your current income tax return and W-2's**
- **Copies of any benefits you are receiving**
  - Social Security benefit letter
  - Unemployment notifications
  - Disability benefit letters
  - Proof of any public assistance
    - Food Stamps
    - WIC program
    - Primary Adult Care Program
    - Energy Assistance
    - Free or reduced lunch plans
- **If there is no income**, you will need to call me to obtain a copy of our Verification of No Income form

Please be assured that this information is necessary to determine your eligibility.

UNIVERSITY of MARYLAND
UPPER CHESAPEAKE HEALTH

Maryland State Uniform Financial Assistance Application

Information About You

Name: _____ _____ _____
First *Middle Initial* *Last*

Social Security Number ☐☐☐ - ☐☐ - ☐☐☐☐ Marital Status: ☐ Single ☐ Married ☐ Separated

US Citizen: ☐ Yes ☐ No Permanent Resident: ☐ Yes ☐ No

Home Address: _____
Street Address
_____
City *State* *Zip code* *Country*

Home Phone: (☐☐☐) ☐☐☐ - ☐☐☐☐
(Area Code) ### - ####

Employer Name & Address: _____
Employer Name
_____
Street Address
_____
City *State* *Zip code*

Work Phone: (☐☐☐) ☐☐☐ - ☐☐☐☐
(Area Code) ### - ####

Household Members:

Name	*Age*	*Relationship*

Have you applied for Medical Assistance ☐ Yes ☐ No

If yes, what was the date you applied? ☐☐/☐☐/☐☐☐☐ *(MM/DD/YYYY)*

If yes, what was the determination?

Do you receive any type of state or county assistance? ☐ Yes ☐ No

If Yes, please attach a copy of your benefit letter as proof of this assistance.

Please return application to:
UM Upper Chesapeake Health
Patient Accounting Department
2027 Pulaski Highway, Suite 215
Havre de Grace, MD 21078

I. Family Income

List the amount of your monthly income from all sources. You may be required to supply proof of income, assets, and expenses. If you have no income, please provide a letter of support from the person providing your housing and meals. Within two (2) business days following a patient's request for Financial Assistance the hospital will make a determination of probable eligibility.

	Monthly Amount
Employment	
Retirement/pension benefits	
Social security benefits	
Public assistance benefits	
Disability benefits	
Unemployment benefits	
Veterans benefits	
Alimony	
Rental property income	
Strike benefits	
Military allotment	
Farm or self employment	
Other income source:	
Total	

II. Liquid Assets

	Current Balance
Checking account	
Savings account	
Stocks, bonds, CD, or money market	
Other accounts	
Total	

III. Other Assets

If you own any of the following items, please list the type and approximate value.

Home :	Loan Balance:				Approximate value:	
Automobile:	Make:		Year:		Approximate value:	
Additional vehicle:	Make :		Year:		Approximate value:	
Additional vehicle:	Make:		Year:		Approximate value:	
Other property:					Approximate value:	
					Total	

IV. Monthly Expenses

	Amount
Rent or Mortgage	
Utilities	
Car payment(s)	
Credit card(s)	
Car insurance	
Health insurance	
Other medical expenses	
Other expenses	
Total	

Do you have any other unpaid medical bills? ☐ Yes ☐ No

For what service? _____

If you have arranged a payment plan, what is the monthly payment? _____

If you request that the hospital extend additional financial assistance, the hospital may request additional information in order to make a supplemental determination. By signing this form, you certify that the information provided is true and agree to notify the hospital of any changes to the information provided within ten days of the change.

_____ _____ _____

Applicant signature *Date* *Relationship to Patient*

UNIVERSITY of MARYLAND
UPPER CHESAPEAKE HEALTH

UM Harford Memorial Hospital
443-843-5000
UM Upper Chesapeake Medical Center
443-643-1000

Help for Patients to Pay Hospital Care Costs

If you cannot pay for all or part of your care from our hospital, you may be able to get **free** or **lower cost** services.

PLEASE NOTE:

1. We treat all patients needing emergency care, no matter what they are able to pay.
2. There may be services provided by physicians or other providers that are not covered by the **hospital's** Financial Assistance Policy. For a **list of physicians** providing emergency and other medically necessary care in the hospital facility, whose services are not covered under this policy, please visit our website or contact our Financial Assistance Department at (443) 843-5092.
3. You will never be charged for emergency and other medically necessary care more than **amounts generally billed** to patients who are not eligible for financial assistance under the financial assistance policy. Rates are set by the State of Maryland.

HOW THE PROCESS WORKS:

When you become a patient, we ask if you have any health insurance. We will not charge you more for hospital services than we charge people with health insurance. The hospital will:

1. Give you information about our financial assistance policy or
2. Offer you help with a counselor who will help you with the application.

HOW WE REVIEW YOUR APPLICATION:

The hospital will look at your ability to pay for care. We look at your income and family size. You may receive free or lower costs of care if:

1. Your income or your family's total income is at 300% or less of the federal poverty level.
2. Your income or your family's income is at 500% or less of the federal poverty level **and** your medical debt incurred at an UMMS hospital facility exceeds 25% of your family's annual household income.

PLEASE NOTE: If you are able to get financial help, we will tell you how much you can get. If you are not able to get financial help, we will tell you why not.

HOW TO APPLY FOR FINANCIAL HELP:

1. Fill out a **Financial Assistance Application Form**. (see below for website address of application form)
2. Give us all of your information to help us understand your financial situation.
3. Turn the Application Form into us.

PLEASE NOTE: The hospital must screen patients for Medicaid before giving financial help. Cosmetic and other non-medically necessary services may not be covered.

OTHER HELPFUL INFORMATION:

1. You can get a **free copy** of our Financial Assistance Policy and Application Form:
- *Online* at www.umuch.org/patients/financial-assistance
- *In person* at UM Upper Chesapeake Health, 2027 Pulaski Highway Ste 215, Havre De Grace MD 21078
- *By mail* by calling (443) 843-5092 to request a copy.

2. You can call the Financial Assistance Department at (443) 843-5092 if you have questions or need help applying.
3. The FAP, FAP application or Plain Language Summary are also available in Spanish. If you need information translated in another language, please call (443) 843-5092.

UNIVERSITY of MARYLAND
UPPER CHESAPEAKE HEALTH

UM Harford Memorial Hospital
443-843-5000
UM Upper Chesapeake Medical Center
443-643-1000

[f_Mis Current Date]

[f_Reg Guar Name Full]
[f_Reg Guarantor Address1]
[f_Reg Guarantor City], [f_Reg Guarantor State] [f_Reg Guarantor Zip]

Dear [f_Reg Guar Name Full]:

Thank you for returning your Financial Assistance application.

At this time, we have completed a preliminary review of your application and have determined that you did not return sufficient information with your application to allow us to complete the assessment of your eligibility. However, based on information we have received your eligibility for Financial Assistance is probable.

Therefore, if you would like for us to reconsider your application at this time, please return the requested information to us within **5 business days** to **University of Maryland Upper Chesapeake Health, Patient Accounting Department, 2027 Pulaski Highway, Suite 215, Havre de Grace, MD 21078.**

Missing or incomplete information: Account #: [f_Reg Account Number]

___ Three (3) most recent pay stubs
___ Three (3) most current bank statements (must be copies of original statements)
___ Explanation for deposits on bank statements
(explanations must be submitted in writing)
___ Proof of Retirement/Pension benefits
___ Proof of Social Security Income
___ Proof of Public Assistance benefits (WIC, PAC, Food Stamps, Energy Assistance)
___ Proof of Disability benefits
___ Proof of Unemployment benefits
___ Proof of Veteran's benefits
___ Proof of Alimony/Child Support
___ Most current Tax Return including W-2's
___ Verification of No Income form
___ Applicant's signature on form
___ Proof of insurance (copy of insurance card)
___ Other _____

Please feel free to contact me directly Monday through Friday at (443) 843-5092 with any questions.

If the requested information is not available, please contact our **Billing Office at 855-748-0680 within 5 business days** on Monday through Thursday from 8am to 8pm or Friday from 8am to 4:30pm to set up an acceptable payment plan. We would like to continue to work with you to clear this account as soon as possible.

Thank you for your continued cooperation.

Sincerely,

Financial Counselor

NOTICE

University of Maryland Upper Chesapeake Health maintains accessibility to all emergency and other medically-necessary services regardless of an individual's ability to pay. The hospital's financial assistance policy will consider free or discounted care for those patients who cannot pay the total cost of hospitalization due to lack of insurance coverage and/or inability to pay. For more information on our financial assistance policy for patients who qualify for help with their hospital bills, or if you require translation services to understand this policy, please call 443-843-5092 or visit us at umuch.org.

AGF 3-2600 March 1 6163214

Exhibit 5

MARYLAND
DEPARTMENT OF HEALTH
OFFICE OF HEALTH CARE QUALITY
SPRING GROVE CENTER
BLAND-BRYANT BUILDING
55 WADE AVENUE
CATONSVILLE, MARYLAND 21228

License No. 12-006

Issued to:

University Of M D Upper Chesapeake Medical Center
500 Upper Chesapeake Drive
Bel Air, MD 21014

Type of Facility: Acute General Hospital

Date Issued: July 1, 2018

Authority to operate in this State is granted to the above entity pursuant to The Health-General Article, Title 19 Section 318 Annotated Code of Maryland, 1982 Edition, and subsequent supplements and is subject to any and all statutory provisions, including all applicable rules and regulations promulgated thereunder. This document is not transferable.

Patricia Tomasko May, MD

Director

Falsification of a license shall subject the perpetrator to criminal prosecution and the imposition of civil fines.

MARYLAND
DEPARTMENT OF HEALTH
OFFICE OF HEALTH CARE QUALITY

SPRING GROVE CENTER
BLAND BRYANT BUILDING
55 WADE AVENUE
CATONSVILLE, MARYLAND 21228

License No. 12-004

Issued to:

University Of Maryland Harford Memorial Hospital
501 South Union Avenue
Havre De Grace, MD 21078

Type of Facility: Acute General Hospital

Date Issued: July 1, 2018

Authority to operate in this State is granted to the above entity pursuant to The Health-General Article, Title 19 Section 318 Annotated Code of Maryland, 1982 Edition, and subsequent supplements and is subject to any and all statutory provisions, including all applicable rules and regulations promulgated thereunder. This document is not transferable.

Patricia Tomasko May MD

Director

Falsification of a license shall subject the perpetrator to criminal prosecution and the imposition of civil fines.

University of Maryland Upper Chesapeake Medical Center

Bel Air, MD

has been Accredited by

The Joint Commission

Which has surveyed this organization and found it to meet the requirements for the

Hospital Accreditation Program

December 8, 2018

Accreditation is customarily valid for up to 36 months.

Craig W. Jones, FACHE
Chair, Board of Commissioners

ID #6279
Print/Reprint Date: 02/19/2019

Mark R. Chassin, MD, FACP, MPP, MPH
President

The Joint Commission is an independent, not-for-profit national body that oversees the safety and quality of health care and other services provided in accredited organizations. Information about accredited organizations may be provided directly to The Joint Commission at 1-800-994-6610. Information regarding accreditation and the accreditation performance of individual organizations can be obtained through The Joint Commission's web site at www.jointcommission.org.

University of Maryland Harford Memorial Hospital

Havre De Grace, MD

has been Accredited by

The Joint Commission

Which has surveyed this organization and found it to meet the requirements for the

Hospital Accreditation Program

November 17, 2018

Accreditation is customarily valid for up to 36 months.

Craig W. Jones, FACHE
Chair, Board of Commissioners

ID #502615
Print/Reprint Date: 02/06/2019

Mark R. Chassin, MD, FACP, MPP, MPH
President

The Joint Commission is an independent, not-for-profit national body that oversees the safety and quality of health care and other services provided in accredited organizations. Information about accredited organizations may be provided directly to The Joint Commission at 1-800-994-6610. Information regarding accreditation and the accreditation performance of individual organizations can be obtained through The Joint Commission's web site at www.jointcommission.org.

Search Again

Return to Multiple Results Page

You entered Legal Business Name: Upper Chesapeake Medical Center

DCN/CCN	640795002
NPI	1598761355
Tracking Id	
Application Type	855A
Name	
Legal Business Name	UPPER CHESAPEAKE MEDICAL CENTER
Received Date	2014-03-20

The status of this application is: Approved

Novitas Solutions has processed and approved this CMS-855, CMS-20134, EFT application, or Opt Out request.

Please refer to the notification letter for complete details and additional required action.

Status History	
Date	**Status**
March 27, 2014	Approved
March 24, 2014	In Process

Search Again

Return to Multiple Results Page

You entered Legal Business Name: Harford Memorial Hospital

DCN/CCN	761500900004-001
NPI	1770589533
Tracking Id	
Application Type	855A
Name	
Legal Business Name	HARFORD MEMORIAL HOSPITAL
Received Date	2016-05-20

The status of this application is: Approved

Novitas Solutions has processed and approved this CMS-855 or EFT application.

Please refer to the notification letter for complete details and additional required action.

Status History	
Date	**Status**
June 15, 2016	Approved
June 15, 2016	In Process
June 15, 2016	In Process
June 13, 2016	Payment Hold
June 6, 2016	In Process
May 31, 2016	Payment Hold
May 31, 2016	In Process
May 17, 2016	Payment Hold
March 28, 2016	In Development
March 28, 2016	In Development
May 21, 2015	Activated/Received
May 21, 2015	In Process
April 14, 2015	Revalidation Requested
January 9, 2015	Revalidation Requested

HEALTHCHOICE

MARYLAND CHILDREN'S HEALTH PROGRAM

MARYLAND PHARMACY ASSISTANCE PROGRAM

LONG TERM CARE

SPECIALTY MENTAL HEALTH SERVICES

WAIVER PROGRAMS

LISTING OF LOCAL DEPARTMENTS OF SOCIAL SERVICES

MEDICAL PROGRAMS HOME

FOR PROVIDERS: WHAT SHOULD I DO IF MY INFORMATION IS INCORRECT?

Search Criteria

MCO: Not Specified **Provider Type:** HOSPITAL - ACUTE
Last Name: Harford Memorial **Provider Location:** State of **MD**
Show only PCP? No

Time taken to search:94 ms <Previous **1** Next> **[Showing 1 - 1 of 1]**

Print this page Search

HARFORD MEMORIAL HOSPITAL
501 S UNION AVE
HAVRE DE GRACE , MD 21078
(443) 643-3721

Provider Number:**0002551 61**
NPI:**1770589533**
HOSPITAL, ACUTE

Handicap Accessible: Y TTY: Y EPSDT Certified:N

Managed Care Organization(s):

AMERIGROUP COMMUNITY CARE	Primary Care Physician: N	
MARYLAND PHYSICIANS CARE	Primary Care Physician: N	Accepting New Patients:N
PRIORITY PARTNERS	Primary Care Physician: N	
U M HEALTH PARTNERS	Primary Care Physician: N	Accepting New Patients:N
UNITEDHEALTHCARE	Primary Care Physician: N	

<Previous **1** Next> **[Showing 1 - 1 of 1]**

Print this page Search

HEALTHCHOICE

MARYLAND CHILDREN'S HEALTH PROGRAM

MARYLAND PHARMACY ASSISTANCE PROGRAM

LONG TERM CARE

SPECIALTY MENTAL HEALTH SERVICES

WAIVER PROGRAMS

LISTING OF LOCAL DEPARTMENTS OF SOCIAL SERVICES

MEDICAL PROGRAMS HOME

FOR PROVIDERS: WHAT SHOULD I DO IF MY INFORMATION IS INCORRECT?

Search Criteria

MCO: Not Specified **Provider Type:** HOSPITAL - ACUTE
Last Name: Upper Chesapeake **Provider Location:** State of **MD**
Show only PCP? No

Time taken to search:390 ms <Previous **1** Next> **[Showing 1 - 3 of 3]**

Print this page Search

UPPER CHESAPEAKE MEDICAL CENTE
500 UPPER CHESAPEAKE DR
BEL AIR , MD 21014
(443) 643-1000

Provider Number:**1413017 60**
NPI:**1598761355**
HOSPITAL, ACUTE

Handicap Accessible: Y TTY: N EPSDT Certified:N

Managed Care Organization(s):

MARYLAND PHYSICIANS CARE Primary Care Physician: N Accepting New Patients:N

UPPER CHESAPEAKE MEDICAL CENTE
500 UPPER CHESAPEAKE DR
BEL AIR , MD 21014
(443) 643-1000

Provider Number:**0004758 61**
NPI:**1598761355**
HOSPITAL, ACUTE

Handicap Accessible: Y TTY: Y EPSDT Certified:N

Managed Care Organization(s):

AMERIGROUP COMMUNITY CARE Primary Care Physician: N
MARYLAND PHYSICIANS CARE Primary Care Physician: N Accepting New Patients:N
U M HEALTH PARTNERS Primary Care Physician: N Accepting New Patients:N

UPPER CHESAPEAKE MEDICAL SERVI
500 UPPER CHESAPEAKE DR
BEL AIR , MD 21014
(443) 643-1500

Provider Number:**0218227 60**
NPI:**1497801419**
HOSPITAL, ACUTE

Handicap Accessible: Y TTY: Y EPSDT Certified:N

Managed Care Organization(s):

U M HEALTH PARTNERS Primary Care Physician: N Accepting New Patients:N

<Previous **1** Next> **[Showing 1 - 3 of 3]**

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Exhibit 6

Analysis of HMH MSGA Bed Need Prior to Conversion to UC FMF

The conversion to inpatient status of 34% of observation cases that historically came through the emergency department and stayed 24 or more hours will increase HMH's projected inpatient discharges through fiscal year 2021 and the number of discharges that will shift to UCMC in fiscal year 2022. The applicants used the following methodology and assumptions to project inpatient utilization at HMH.

1. UCMC / HMH MSGA Service Area Use Rates

The MSGA service area for HMH is consistent with the service area defined for UCMC and HMH combined as presented in the Request for Exemption from Certificate of Need Review for the Merger and Consolidation of Harford Memorial Hospital and Upper Chesapeake Medical Center, dated November 21, 2018. The conversion of observation cases to adult inpatient admissions in fiscal year 2020 will increase inpatient admissions and service area use rates in this combined UCMC / HMH MSGA service area. Based on the shift of observation cases to inpatient admissions as described in the HMH / UC FMF Observation Bed Need section, the total inpatient service area use rate is expected to increase 4.3% in fiscal year 2020 followed by a 7.0% increase in fiscal year 2021 (**Table 1**). In fiscal year 2022, a 2.2% increase in the discharge use rate reflects the expectation that, based on historical utilization, approximately 400 patients that stay greater than 48 hours will be transferred from UC FMF to UCMC. Approximately one-half of those transfers will be admitted as inpatients at UCMC which will increase the discharge use rate.

Table 1
UCMC / HMH Historical and Projected MSGA Use Rate
FY2015 - FY2024

	Historical				Projection						% Change
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY18-FY24
MSGA Use Rates											
Age 0-14	**13.7**	**13.6**	**13.5**	**13.1**	**13.1**	**13.1**	**13.1**	**13.1**	**13.1**	**13.1**	
%Change	*-19.3%*	*-1.2%*	*-0.1%*	*-3.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Age 15-64	**51.4**	**51.9**	**51.9**	**49.2**	**49.2**	**50.5**	**52.9**	**53.3**	**53.3**	**53.3**	
%Change	*-10.9%*	*1.0%*	*0.0%*	*-5.1%*	*0.0%*	*2.5%*	*4.9%*	*0.7%*	*0.0%*	*0.0%*	*8.3%*
Age 65-74	**188.3**	**183.6**	**182.7**	**172.0**	**172.0**	**176.8**	**186.2**	**187.7**	**187.7**	**187.7**	
%Change	*-6.7%*	*-2.5%*	*-0.5%*	*-5.9%*	*0.0%*	*2.8%*	*5.3%*	*0.8%*	*0.0%*	*0.0%*	*9.1%*
Age 75+	**358.6**	**350.5**	**336.1**	**312.1**	**312.1**	**323.7**	**346.6**	**350.1**	**350.1**	**350.1**	
%Change	*-4.0%*	*-2.3%*	*-4.1%*	*-7.2%*	*0.0%*	*3.7%*	*7.1%*	*1.0%*	*0.0%*	*0.0%*	*12.2%*
Total	**74.9**	**75.3**	**75.4**	**72.0**	**72.9**	**76.1**	**81.4**	**83.2**	**84.3**	**85.5**	
	-7.3%	*0.5%*	*0.1%*	*-4.5%*	*1.4%*	*4.3%*	*7.0%*	*2.2%*	*1.4%*	*1.4%*	*18.9%*

Prior to and after the conversion of observation cases to inpatient admissions, HMH expects that use rates will remain constant at the age cohort level. Due to the aging of the population, though, to age cohorts with higher use rates, the aggregate use rate is expected to increase by 1.4% in fiscal year 2019 and in fiscal years 2023 and 2024. Combined, the aggregate use rate is expected to increase 18.9% from fiscal year 2018 to 2024, driven predominantly by the conversion of observation cases to inpatient admissions (**Table 1**).

2. *UCMC / HMH MSGA Service Area Discharges*

With 0.6% to 0.7% annual population growth and increases in use rates, the total projected MSGA service area discharges are projected to increase 23.3% between fiscal year 2018 and fiscal year 2024 as presented below (**Table 2**).

Table 2
HMH Historical and Projected MSGA Service Area Discharges
FY2015 - FY2024

	Historical				Projection						% Change
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY18-FY24
Service Area Discharges	**18,879**	**19,071**	**19,183**	**18,410**	**18,764**	**19,679**	**21,174**	**21,779**	**22,233**	**22,703**	
%Change	*-6.8%*	*1.0%*	*0.6%*	*-4.0%*	*1.9%*	*4.9%*	*7.6%*	*2.9%*	*2.1%*	*2.1%*	*23.3%*

3. *HMH MSGA Market Share*

HMH's MSGA market share increased from fiscal year 2015 to 2018 (**Table 3**). Based on actual utilization in fiscal year 2019, though, HMH estimates that its market share decreased by 6.8%. In fiscal years 2020 and 2021, HMH's market share is expected to increase 4.5% and 7.6% as HMH captures all of the observation cases at HMH that are converted to service area inpatient admissions. In fiscal year 2022, HMH is expected to close and consolidate the majority of its inpatient MSGA services at UCMC.

Table 3
HMH's Historical and Projected MSGA Market Share
FY2015 - FY2021

	Historical				Projection			% Change
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY18-FY21
HMH Market Share	13.3%	13.9%	13.9%	14.4%	13.4%	14.0%	15.1%	
%Change		*4.8%*	*-0.3%*	*3.7%*	*-6.8%*	*4.5%*	*7.6%*	*4.7%*

4. *HMH Out-of-Service Area MSGA Discharges*

HMH's out-of-service area MSGA discharges are projected to equal 20.7% of its in-service area discharges as experienced in fiscal year 2018 (**Table 4**), but decline slightly in fiscal years 2020 and 2021 with the aging of the population into older age cohorts with a lower percentage of patients from outside the service area.

Table 4
HMH's Historical and Projected Out-of-Service Area MSGA Discharges
% of Service Area Discharges
FY2015 – FY2021

	Historical				Projection			% Change
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY18-FY21
HMH Out of Service Area %	16.8%	18.1%	20.8%	20.7%	20.7%	20.6%	20.5%	
%Change		*7.7%*	*14.7%*	*-0.5%*	*0.0%*	*-0.4%*	*-0.4%*	*-0.8%*

5. HMH Inpatient MSGA Discharges

Based on the assumptions listed above, HMH's MSGA discharges are projected to increase from fiscal year 2018 to fiscal year 2021 by 20.3% (**Table 5**). This growth is driven by (1) a 5.0% reduction in actual MSGA utilization in fiscal year 2019 and (2) 9.5% and 15.6% increases in MSGA utilization in fiscal years 2020 and 2021 related to the conversion of observation cases to inpatient admissions.

Table 5
HMH's Historical and Projected Inpatient MSGA Discharges
FY2015 – FY2024

	Historical				Projection			% Change
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY18-FY21
HMH IP Discharges	**2,928**	**3,134**	**3,213**	**3,196**	**3,036**	**3,325**	**3,845**	
%Change		*7.0%*	*2.5%*	*-0.5%*	*-5.0%*	*9.5%*	*15.6%*	*20.3%*

HMH projects that its MSGA discharges would continue to grow 2.2% in fiscal year 2022 with population growth and the aging of that population into age cohorts with higher use rates and market share. HMH expects, though, to close its facility in fiscal year 2022 and consolidate a majority of its inpatient MSGA services at UCMC. Some of its acute inpatient services will shift to other local providers based on a drive time analysis that was conducted by service line. The applicants anticipate that all of HMH's surgical cases will be retained within UM UCH for the following reasons: (1) community medical staff referral patterns are not anticipated to change based upon change in facility location; (2) all surgical providers currently operating at HMH have privileges at UCMC; and (3) surgical providers currently performing cases at HMH have expressed the intent to move such cases to UCMC. A majority of the operating surgical providers at HMH are employed by UM UCH and, therefore, the shift of surgical practice locations to other hospitals is not anticipated. In addition, UM UCH and the applicants are not anticipating a change in the primary care provider base other than the primary care recruitment that UM UCH is leading in conjunction with community and employed primary care providers.

As a result of the foregoing reasons, the applicant projects that 74.4% of HMH's acute medical and surgical cases will shift to UCMC and 25.6% will shift to other facilities (**Table 6**).

Table 6
Shift of HMH MSGA Discharges
FY2022

HMH MSGA Discharges	Projected FY2022	% of HMH Discharges
Medical Discharges	3,389	86.2%
Surgical Discharges	542	13.8%
HMH MSGA Discharges	3,931	100.0%
Transfer to UCMC	(2,923)	-74.4%
Transfer to UHCC	(859)	-21.8%
Transfer to Other Hospitals	(149)	-3.8%
Transfer of HMH MSGA Discharges	(3,931)	-100.0%

Exhibit 7

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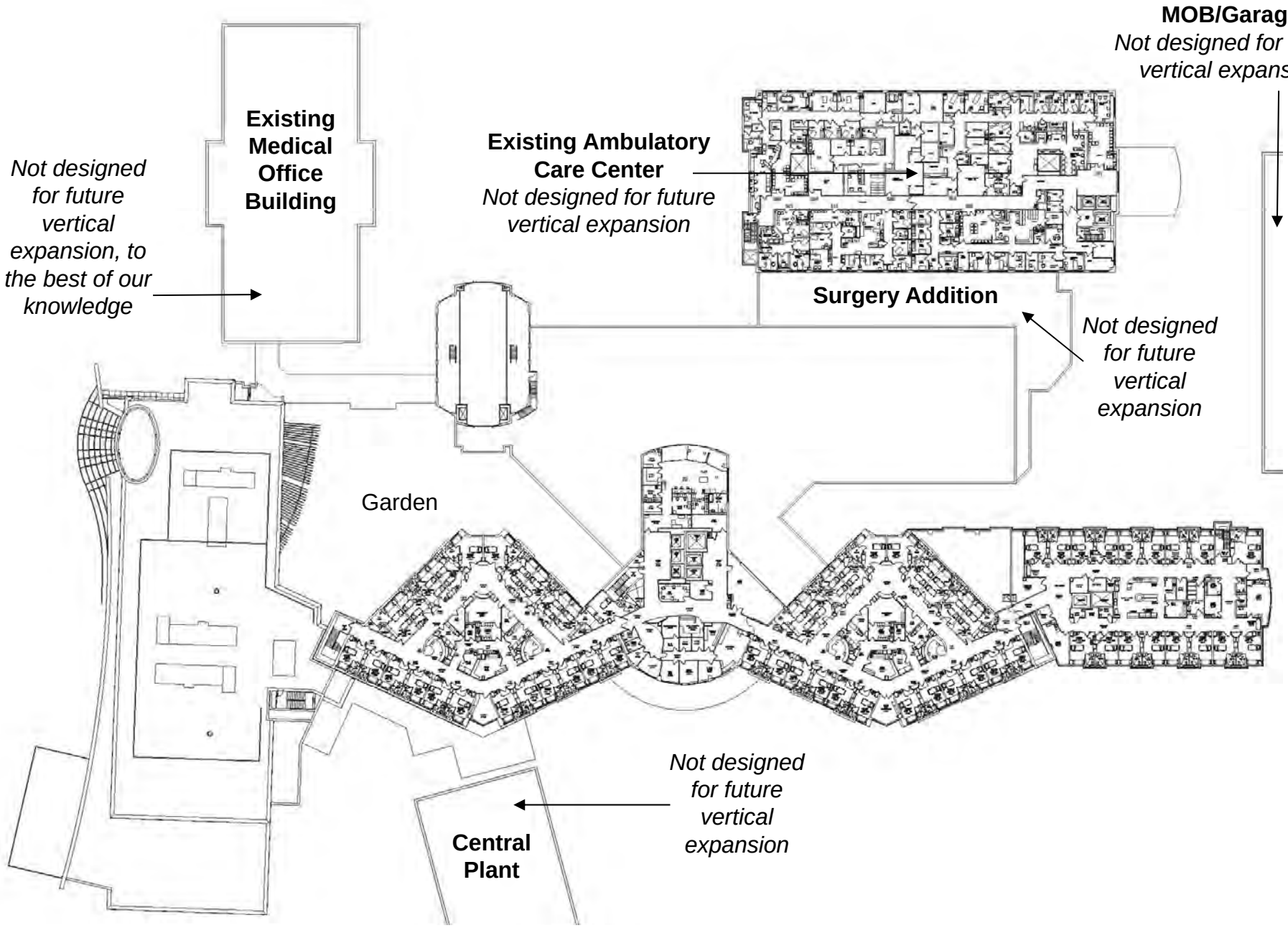
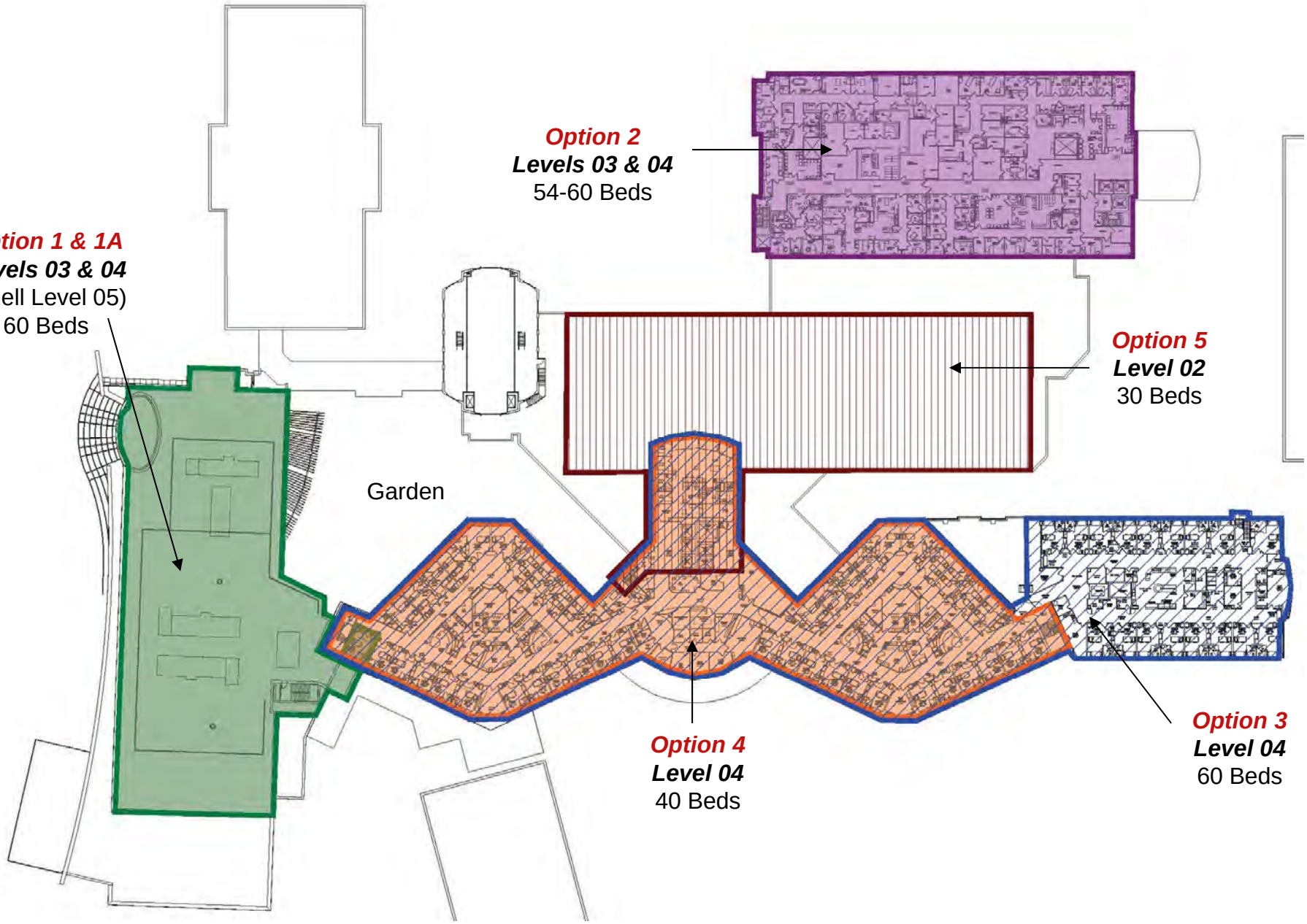
Upper Chesapeake Medical Center

Initial Studies – Structural limitations



Options Overview



Option 1 and 1A – Add 2 Levels above Cancer Center, optional shelled floor above

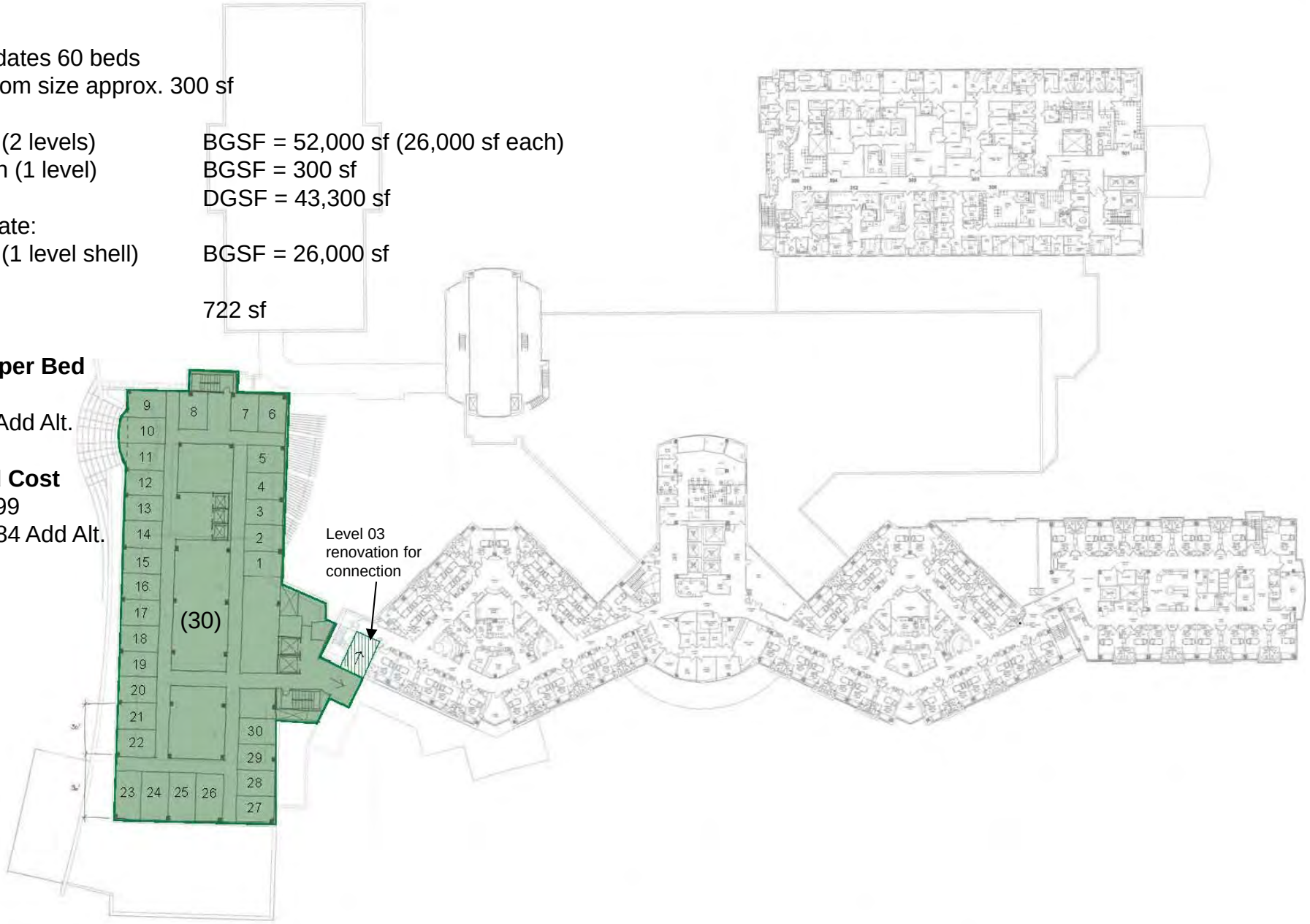
Levels 03 & 04

Accommodates 60 beds
Patient Room size approx. 300 sf

New Build (2 levels)	BGSF = 52,000 sf (26,000 sf each)
Renovation (1 level)	BGSF = 300 sf
	DGSF = 43,300 sf
Add Alternate:	
New Build (1 level shell)	BGSF = 26,000 sf
DGSF/bed	722 sf

Est. Cost per Bed
$429,628
+$69,340 Add Alt.

Estimated Cost
$25,777,699
+$4,160,384 Add Alt.



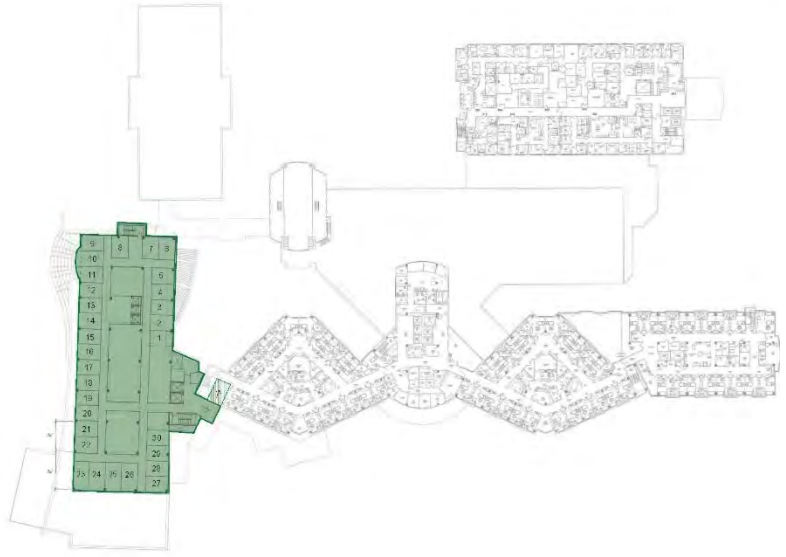
Option 1 and 1A – Opportunities and Challenges

OPPORTUNITIES

- Accommodates 60 Beds
- Patient Rooms in the 300 sf range
- Ideal for oncology beds
- Optional Shell for future expansion
- Structural stub-ups in place
- Rooftop mechanical equipment disposable/planned to be replaced
- Most recent addition to campus, so most likely to meet current seismic codes
- Planned to become high-rise; conversion accommodations in place

CHALLENGES

- Loss of 1 bed on adjacent wing for connector on Level 03
- Replace two existing chillers with larger units
- Replace 3 existing cooling towers with larger units
- Replace 2 existing boilers with larger units
- Replace existing fire pump
- Building will become high-rise
- Requires new emergency power feeder from central plant



Option 2 – Build New MOB, relocate physicians, renovate 2 Levels of ACC

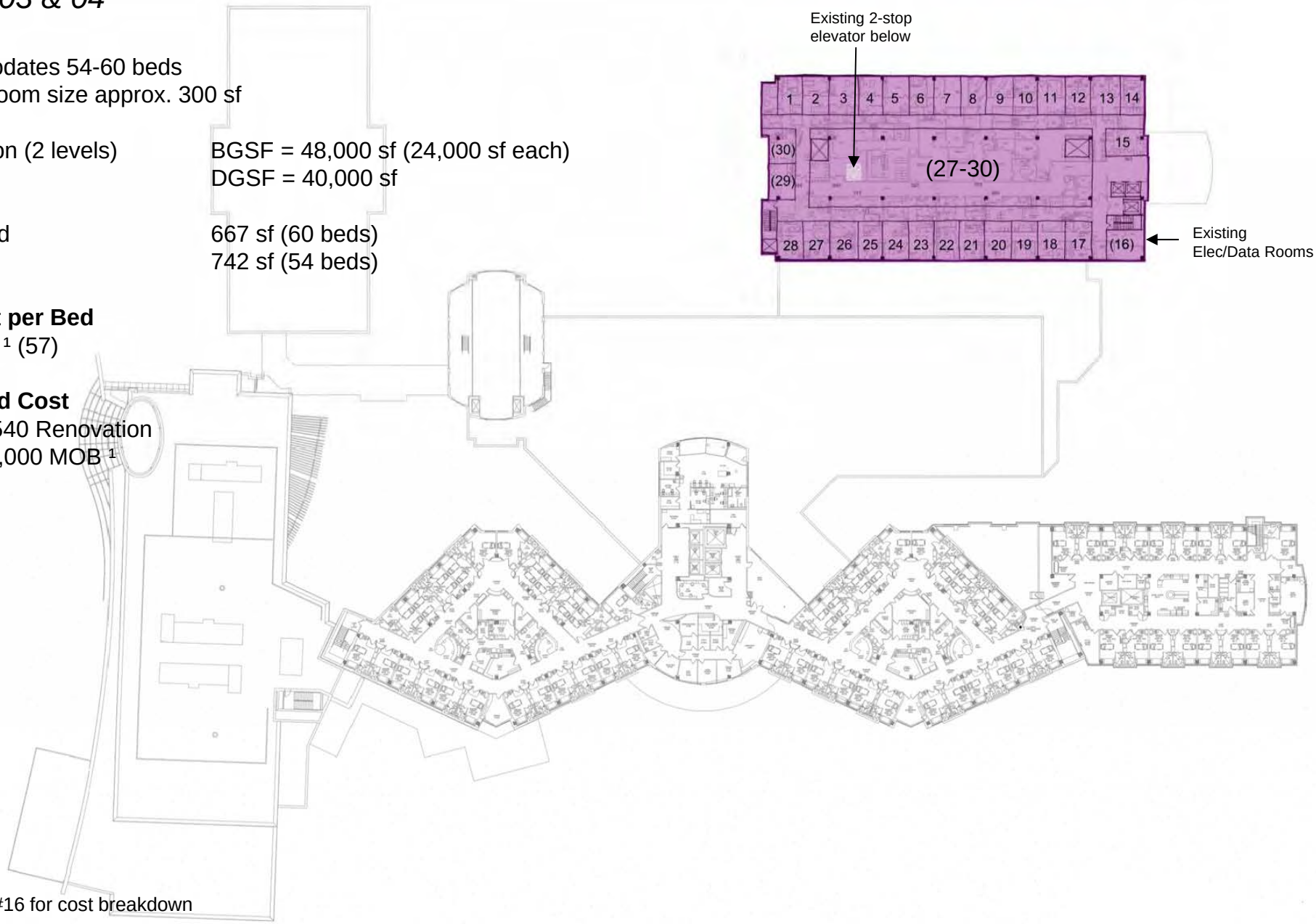
Levels 03 & 04

Accommodates 54-60 beds
Patient Room size approx. 300 sf

Renovation (2 levels)	BGSF = 48,000 sf (24,000 sf each) DGSF = 40,000 sf
DGSF/bed	667 sf (60 beds) 742 sf (54 beds)

Est. Cost per Bed
$541,816 [1] (57)

Estimated Cost
$17,083,540 Renovation
+$13,800,000 MOB [1]



[1]See slide #16 for cost breakdown

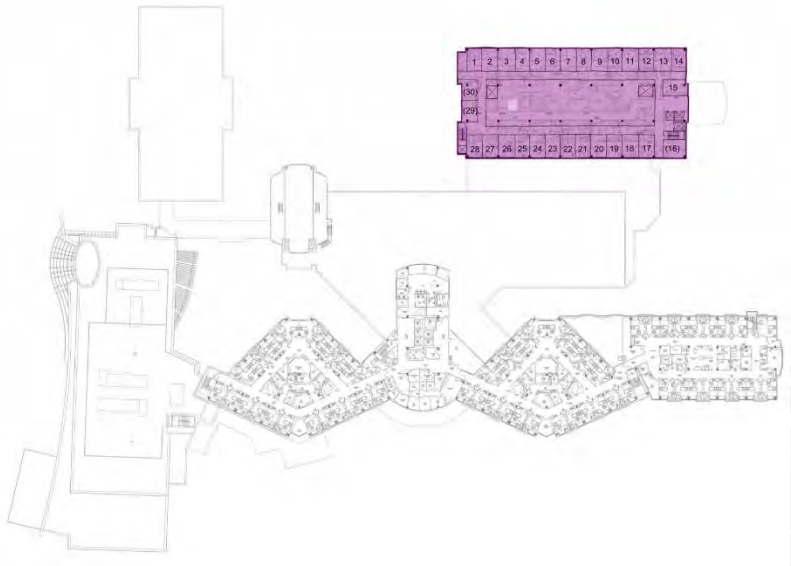
Option 2 – Opportunities and Challenges

OPPORTUNITIES

- Possibility for 60 Beds
- Patient Rooms in the 300 sf range
- Immediate access from parking garage
- Ability to expand MOB space
- Possibility to also renovate an additional level for additional beds in the future
- Interior renovation should not require structural evaluation provided the Risk Category (occupancy) does not change.

CHALLENGES

- Requires first building a new MOB
- Distance from other patient units
- Only 1 patient/service elevator existing
- 2 potential patient room locations non-standard, non-traditional
- 1 potential patient room location currently houses Elec/Data Rooms
- Physician offices relocation
- Plenum return system to be converted to fully ducted
- Requires new sanitary risers to be installed which will impact second floor
- Requires new medical gas risers extended up from Garden Level
- Requires new emergency power feeder from central plant



Option 3 – Add 1 Level above main hospital

Level 04

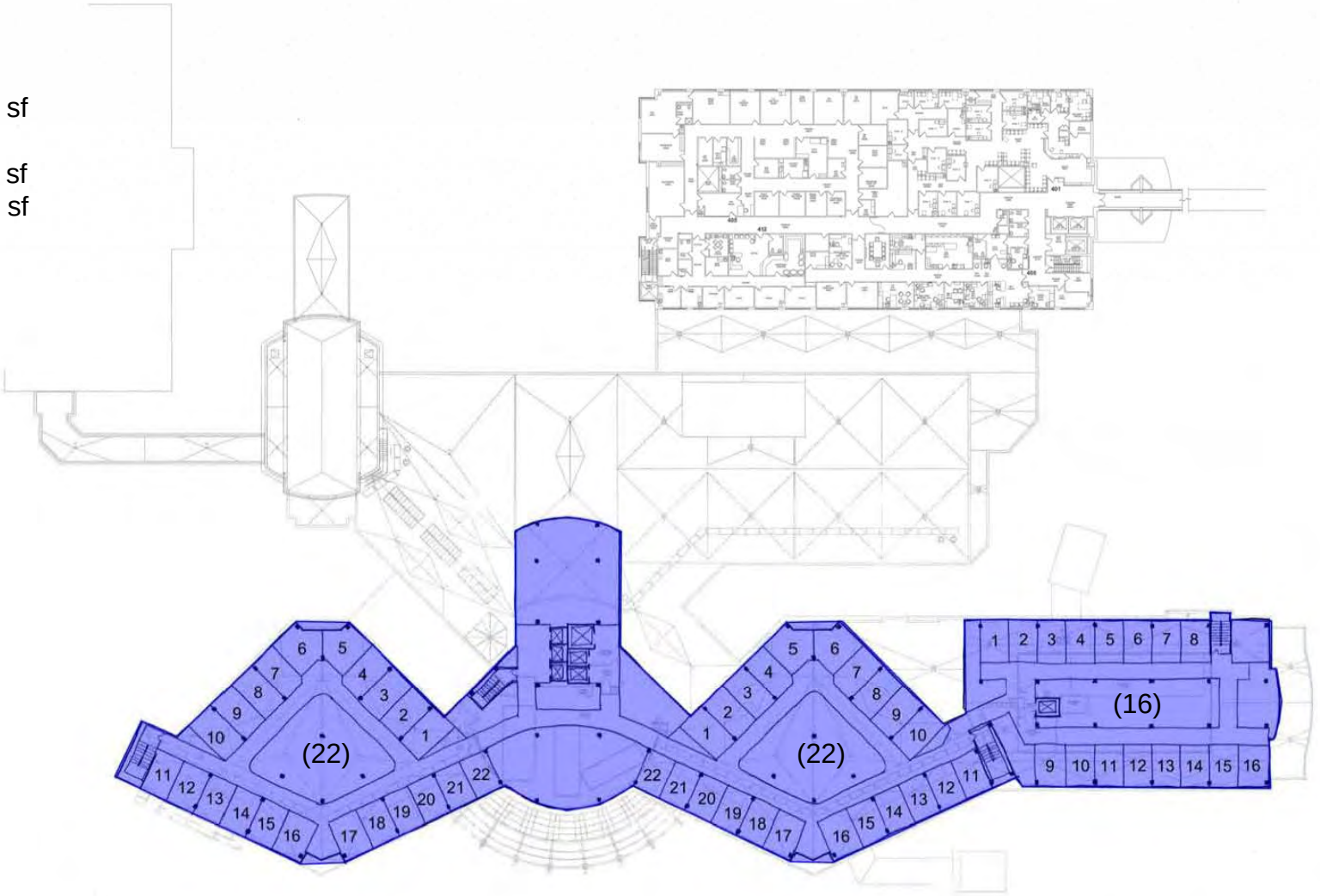
Accommodates 60 beds
Patient Room size approx. 250 sf

New Build BGSF = 47,000 sf
DGSF = 39,200 sf

DGSF/bed 653 sf

Est. Cost per Bed
$627,657 (60)

Estimated Cost
$37,659,430



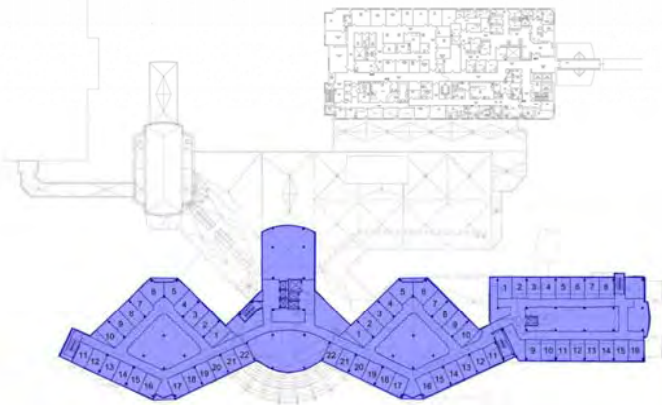
Option 3 – Opportunities and Challenges

OPPORTUNITIES

- Accommodates 60 Beds
- Maintains original patient unit configuration for wayfinding and staffing consistency
- Limits construction to rear of property

CHALLENGES

- Creates unfavorable staffing ratios for today's standards
- Patient Rooms in the 250 sf range
- Requires relocation of penthouses
- Requires structural re-analysis for seismic compliance with current building codes
- Requires phased construction including temporary AHU's which will increase construction duration
- Replace one existing chiller with a larger unit
- Replace 2 existing cooling towers with larger units
- Replace existing fire pump
- Requires new emergency power feeder from central plant
- Replace all rooftop fans, lightning protection, etc.



Option 4 – Add 1 Level above main hospital core

Level 04

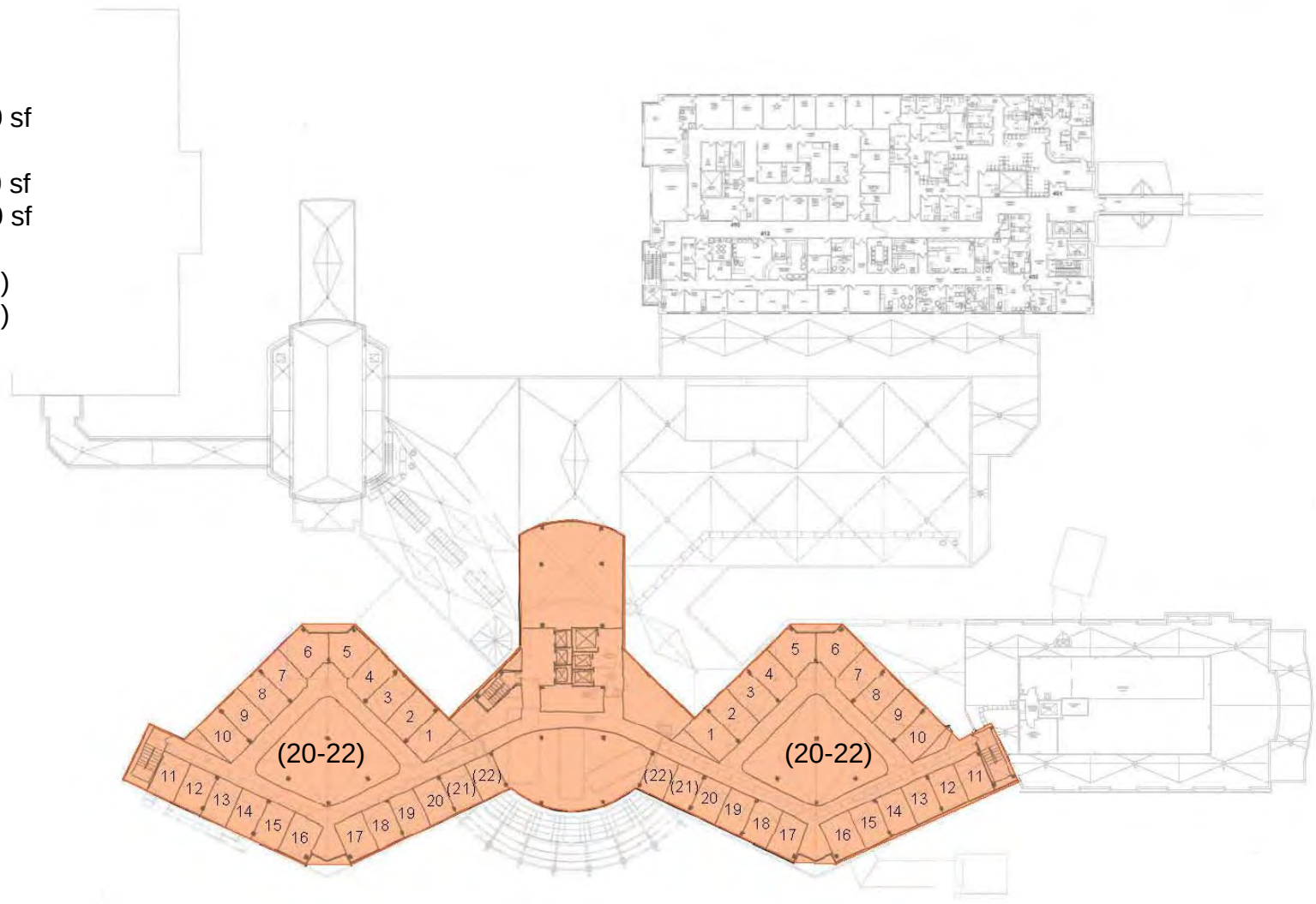
Accommodates 40-44 beds
Patient Room size approx. 250 sf

New Build BGSF = 35,000 sf
DGSF = 29,200 sf

DGSF/bed 664 sf (44 beds)
730 sf (40 beds)

Est. Cost per Bed
$693,319 (40)

Estimated Cost
$27,732,744



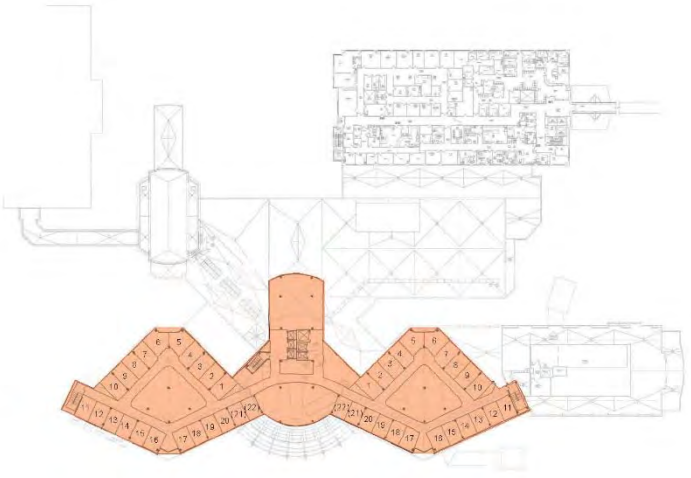
Option 4 – Opportunities and Challenges

OPPORTUNITIES

- Maintains original patient unit configuration for wayfinding and staffing consistency
- Limits construction to rear of property

CHALLENGES

- 44 Bed maximum
- Creates unfavorable staffing ratios for today's standards
- Patient Rooms in the 250 sf range
- Requires structural re-analysis for seismic compliance with current building codes
- Requires relocation of penthouse
- Three existing air handling units would be required to be removed
- Requires phased construction including temporary AHU's which will increase construction duration
- Replace one existing chiller with a larger unit
- Replace 2 existing cooling towers with larger units
- Replace existing fire pump
- Requires new emergency power feeder from central plant
- Replace all rooftop fans, lightning protection, etc.



Option 5 – Add 1 Level above D&T, connect to existing main elevator core

Level 02

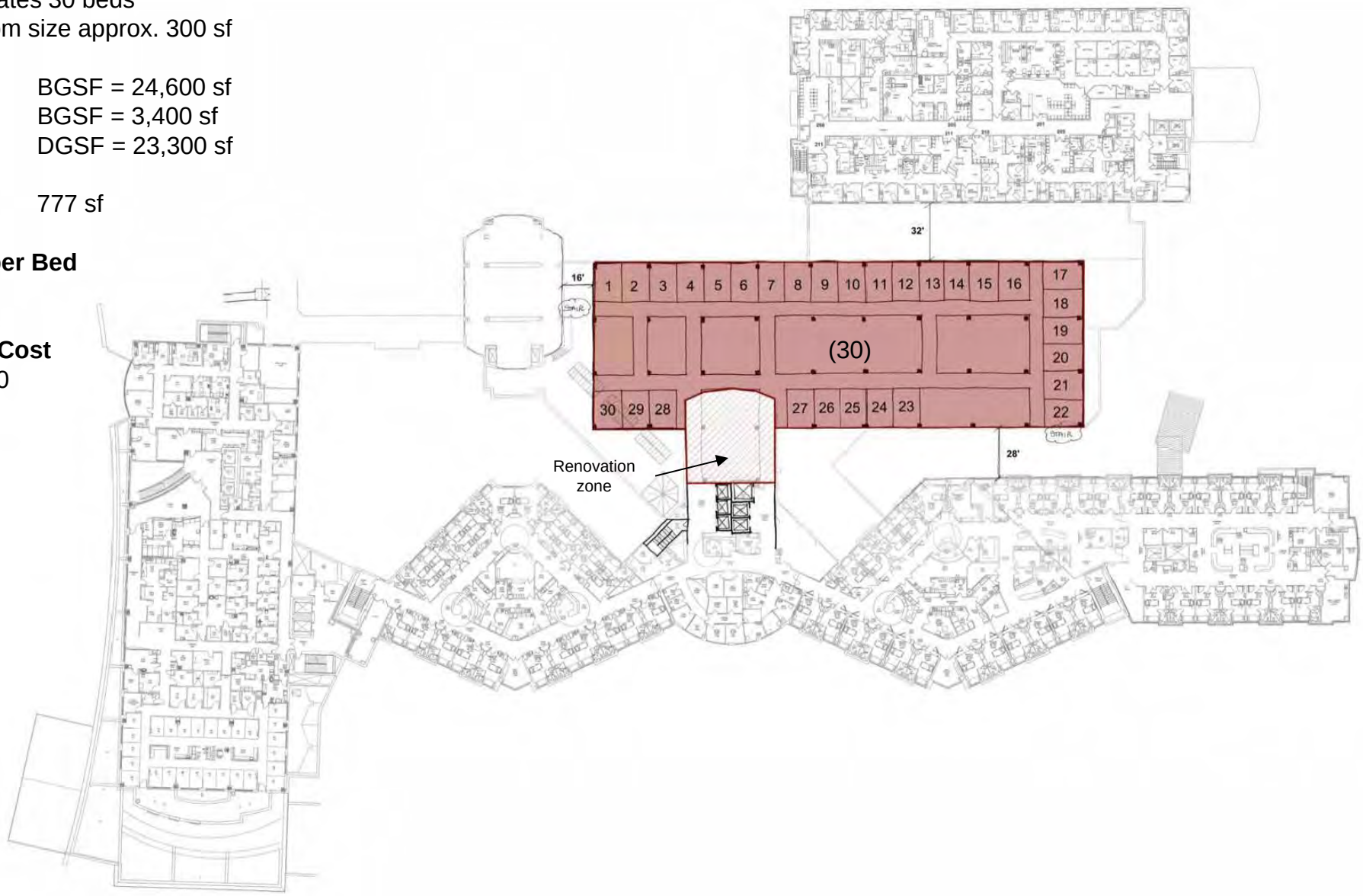
Accommodates 30 beds
Patient Room size approx. 300 sf

New Build BGSF = 24,600 sf
Renovation BGSF = 3,400 sf
DGSF = 23,300 sf

DGSF/bed 777 sf

Est. Cost per Bed
$700,693

Estimated Cost
$21,020,790



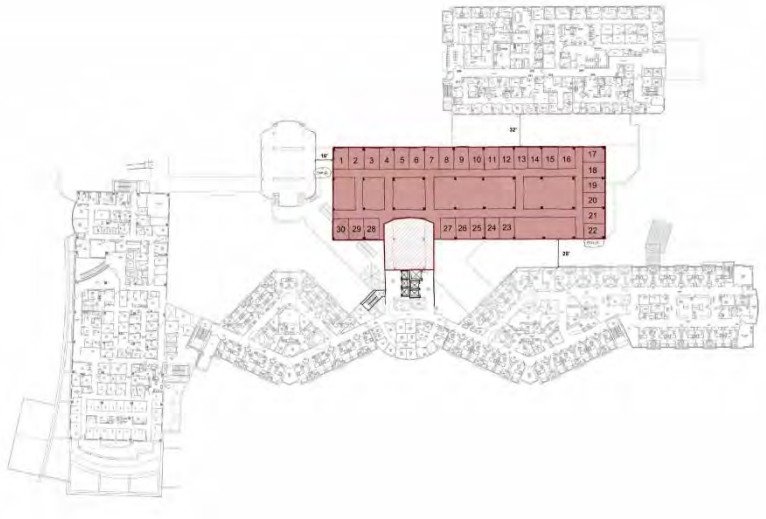
Option 5 – Opportunities and Challenges

OPPORTUNITIES

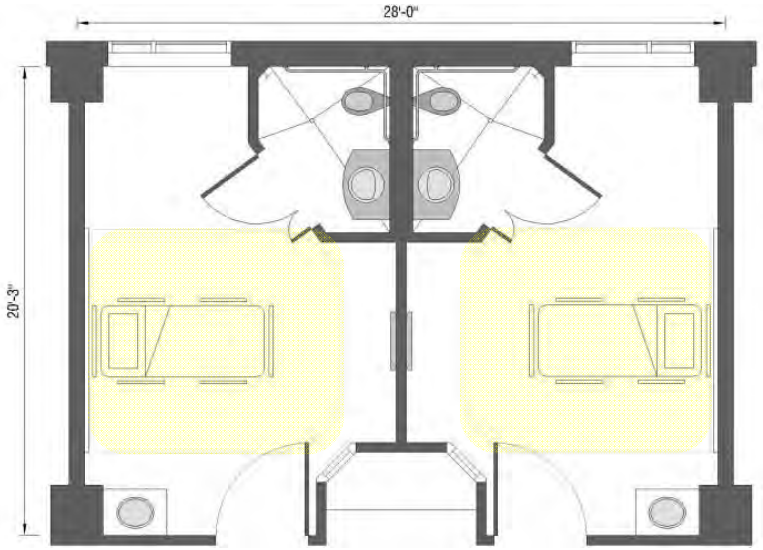
- Connection to other patient units
- Patient Rooms in the 300 sf range
- Good location for Med/Surg beds
- Utilization of existing visitor elevators simplifies wayfinding
- Provides plentiful support space

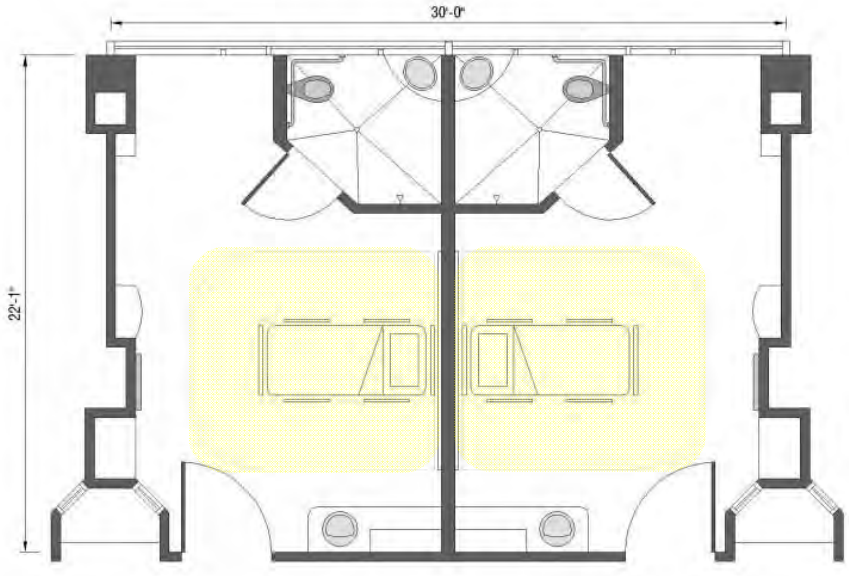
CHALLENGES

- Limited to 30 Beds
- Views into other occupied spaces
- (2) New stairs required through existing space on Level 01 (renovation)
- Sub-optimal bed configuration for staffing/nursing (split rooms)
- Construction over Surgery
- Requires relocation of Surgical air handler and MRI chillers
- Requires structural re-analysis for seismic compliance with current building codes
- Requires New sanitary piping in Surgery ceilings
- Requires relocation of Surgical air handler and MRI chillers
- Three existing air handling units would be required to be removed and relocated to the roof
- Requires phased construction including temporary AHU's which will increase construction duration
- Replace one existing chiller with a larger unit
- Replace 2 existing cooling towers with larger units
- Requires new emergency power feeder from central plant
- Replace all rooftop fans, lightning protection, etc.



Sample Patient Room Size Comparison

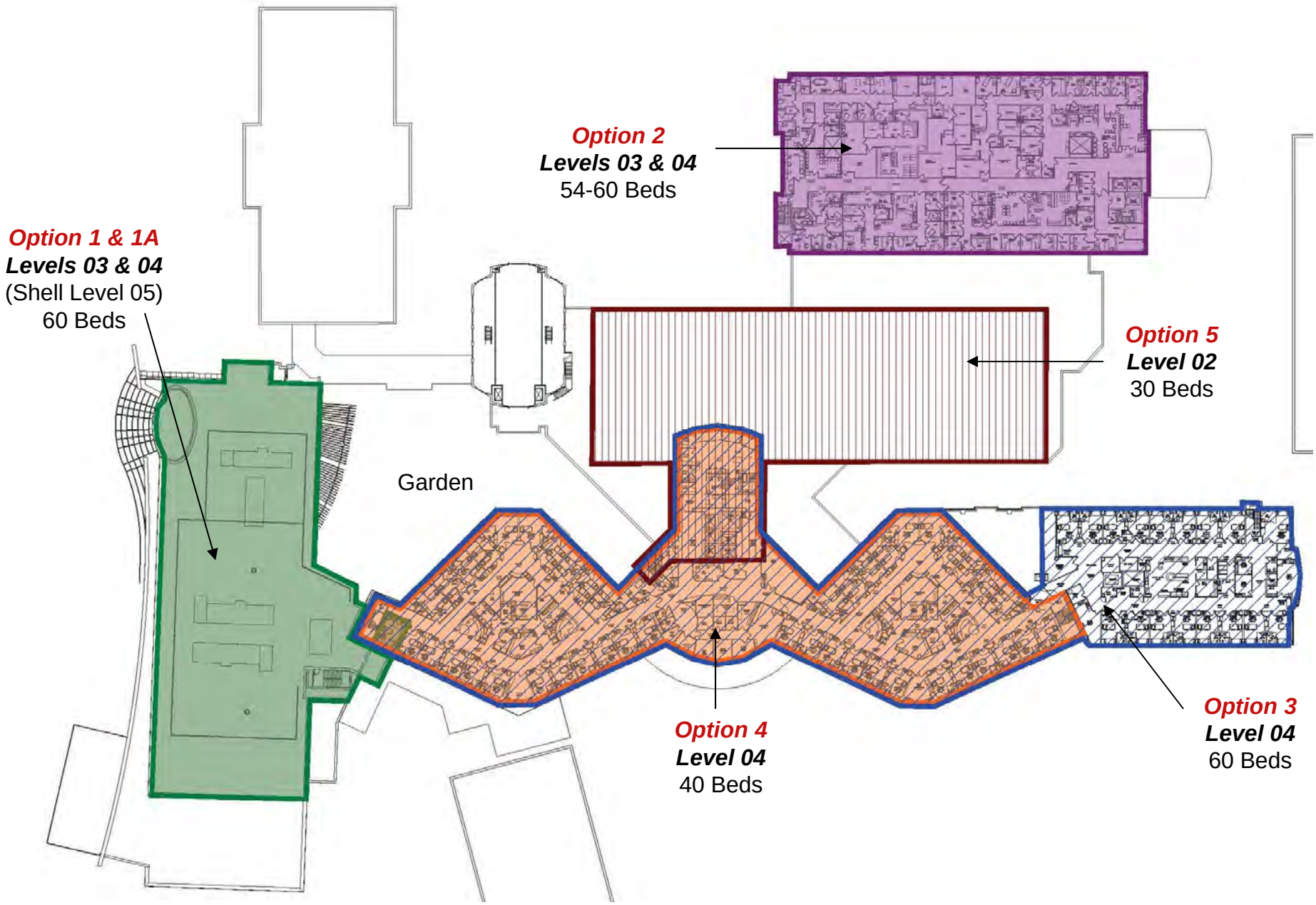




Options 3 & 4 Above Main Hospital	
Total S.F.	250
Room S.F.	215
Toilet S.F.	35
Convertibility	Med/Surg
Comments: *Harris Methodist S.W., 2007*	

Options 1, 2, & 5 Cancer, ACC, Above D&T	
Total S.F.	303
Room S.F.	262
Toilet S.F.	41
Convertibility	Med/Surg
Comments: *Ahuja Medical Center, 2010*	

Options Overview



Options Overview with Pricing

	Option 1 Cancer Center	Option 1A (Add Alternate) Cancer Center	Option 2 ACC	Option 3 Main Hospital	Option 4 Main Hospital Core	Option 5 Above D & T	Optimal [1]
BGSF (sf)	52,000	26,000	48,000	47,000	35,000	24,600	
DGSF (sf)	43,300	21,650	40,000	39,200	29,200	23,300	
# of Floors	2	1	2	1	1	1	
# of Beds	60	30 (potential)	54 - 60	60	40 - 44	30	60
Room size (sf)	300	N/A	300	250	250	300	290-350
DGSF/Bed (sf)	722	N/A	742 - 667	653	730 - 664	777	650 [1]
Est. Cost per Bed ($)	429, 628	+69,340 (60)	541,816 [2] (57)	627,657	693,319 (40)	700,693	
Estimated Cost ($M)	**25.8**	**4.2**	**30.9** [2]	**37.7**	**27.7**	**21**	

Note: A/E fees will range between 5 and 8 percent depending on amount of renovation and complexities of each option.

[1] Square footage does not include additional respiratory therapy, case management, and IV therapy needed on unit

[2] Estimate includes new MOB

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Upper Chesapeake Medical Center