STAFF SUMMARY FOR DETERMINATION OF NEED
BY THE PUBLIC HEALTH COUNCIL
September 14, 2016

APPLICANT: Nantucket Cottage Hospital
LOCATION: 57 Prospect Street
Nantucket, MA 02554

PROGRAM ANALYST: Lynn Conover

REGION: HSA V

DATE OF APPLICATION: May 26, 2016

PROJECT NUMBER: 5-3C53

PROJECT DESCRIPTION: New construction of a two-story replacement hospital facility. The building will accommodate in- and out-patient services including one additional operating room, consolidation of ancillary services and physician offices under one roof, creating additional ambulatory space. The total requested gross square foot ("GSF") is 106,302; the current facility will be demolished.

ESTIMATED MAXIMUM CAPITAL EXPENDITURE:
Requested: $85,459,639 (May 2016 dollars)
Recommended: $85,459,639 (May 2016 dollars)
ESTIMATED FIRST YEAR INCREMENTAL OPERATING COST:
Requested: $5,594,829 (May 2016 dollars)
Recommended: $5,594,829 (May 2016 dollars)

LEGAL STATUS: A regular application for a substantial capital expenditure and substantial change in service pursuant to M.G.L. c.111, s.25C and the regulations adopted thereunder.

ENVIRONMENTAL STATUS: No environmental notification form or environmental impact report is required to be submitted for this project since it is exempt under 301 Code of Massachusetts Regulations 10.32 (3), promulgated by the Executive Office of Environmental Affairs pursuant to Massachusetts General Laws, Chapter 30, Section 61-62H. As a result of this exemption, the project has, therefore, been determined to cause no significant damage to the environment.

OTHER PENDING APPLICATIONS: None

COMMENTS BY THE CENTER FOR HEALTH INFORMATION AND ANALYSIS: None submitted

COMMENTS BY THE DIVISION OF MEDICAL ASSISTANCE: None submitted

COMMENTS BY THE HEALTH POLICY COMMISSION: None Submitted

TEN TAXPAYER GROUP(S): None formed

RECOMMENDATION: Approval with conditions

I. PROJECT DESCRIPTION AND BACKGROUND

A. Project Description

I. Overview

Nantucket Cottage Hospital ("NCH" or "Applicant") is a 19-bed non-profit, acute care hospital located at 57 Prospect Street, Nantucket, MA 02108. NCH's DoN application #5-3C53 seeks to construct a replacement hospital facility ("Project"). The gross square feet ("GSF") associated with the Project is 106,302 GSF of new construction. The Project has a maximum capital expenditure ("MCE) of $85,459,639. The hospital is part of Partner's Healthcare System and owned by Massachusetts General Hospital.

II. Project Background

The Applicant is the only hospital located on Nantucket. The existing hospital building was constructed in 1957. It was subsequently renovated in 1964 and 2000. The building has a number of inconsistencies with current standards, including outdated mechanical systems, and undersized square footage per current architectural standards. Space limitations within the physical plant prevent co-location for some services and require the provision of some outpatient services in separate buildings. When utilization of services increases substantially during the summer months, operational inefficiencies are exacerbated for the Applicant.

The Hospital is currently licensed to operate 19 beds: 12 medical/surgical beds, four obstetrics beds, two pediatric beds, and one intensive care bed.

lll. Project Description

The proposed project is to construct a two story replacement hospital which is intended to bring the services into compliance with current architectural standards, thereby improving overall operational efficiency. The new building will contain sufficient square footage to allow the Applicant to utilize equipment that the current facility cannot accommodate. For example, physical therapy will be located in dedicated spaces and will no longer be housed in separate, non-contiguous locations. The design is intended to promote flexibility, allowing the Applicant to grow in the future as service demands evolve. The Applicant notes that the existing Hospital will remain fully operational throughout construction.

The new facility will have ten (10) medical/surgical inpatient beds in private rooms which will meet current square footage requirements for licensure and which will allow for efficient utilization of all ten beds in service, thereby improving occupancy rates. Currently, NCH's 19 beds are located in multi-bed rooms, which the Applicant often is required to block due to gender or infection control concerns, resulting in unused beds and the inability to achieve full occupancy. Additionally, NCH will add a second operating room to better support the labor and delivery service. The additional operating room will serve as a back-up OR for general surgery when needed.

Service	Current	Proposed
Medical Surgical	12	10
ICU	1	0
Pediatrics	2	0
Obstetrics	4	4
	19	**14**

As the chart above shows, the replacement facility will no longer include dedicated inpatient pediatric or intensive care units due to low utilization of these hospital services. However, the applicant notes that it will not discontinue either of these services prior to complying with the Department's Essential Health Services process for the closure of these services, which includes requirements for notice, development of a closure plan, and a public hearing. These units will continue to operate until that process is completed and the closure has been approved by the Department.

As a part of this project, the Applicant intends to apply to CMS for certification as a Rural Health Clinic. To be eligible for this certification, the Applicant plans to consolidate the primary care practices of physicians currently practicing in different locations on Nantucket into hospital space.

II. STAFF ANALYSIS

A. Health Planning Process

The Applicant reports that this project is the result of an extensive several years' planning process to ensure that the needs of the patients in the primary service area were addressed. This process focused on ensuring cost-effectiveness, financial feasibility, adherence to current clinical and building standards, and patient programmatic needs in recognition of its status as a rural health provider.

Prior to filing this application, the Applicant consulted with the Determination of Need Program and the Office of Community Health Planning, the Division of Medical Assistance, members of the medical community of Nantucket Island, community organizations, elected officials, the Nantucket Fire Department, Palliative & Supportive Care of Nantucket, Our Island Home, Community Foundation for Nantucket, Mass General Physician's Organization, and the President of the Medical Staff in collaboration with Partners Health Care, as well as several patients, many of whom provided letters of support to whom?.

Based on the above information, Staff finds that the Applicant has engaged in a satisfactory health planning process.

B. Health Care Requirements

1. Service Area & Population

The Applicant identified its primary service area ("PSA") based on patient origin data compiled by Massachusetts Health Data Consortium. Approximately 88% of the Applicant's patient discharges are residents of Nantucket, making Nantucket the primary service area. The remainder of the patient discharges consists of non-island residents. The following shows the Applicant's patient discharge data:

Nantucket Cottage Hospital Service Area Communities[1]

Community	Patient Discharges	Hospital Dependency	Cumulative Percent
Nantucket	429	87.9%	87.9%
Other USA	26	5.3%	93.2%
Other New York	13	2.7%	95.9%

[1] Massachusetts Health Data Consortium data.

Total	**468**	**95.9%**	**95.9%**

The Applicant performed a review of historical and projected population data for its PSA to determine the future needs for the Project. The population of the PSA has shown steady and consistent growth since 2000. According to U.S. Census data, there were 8,368 full-time residents residing in Nantucket in 2010. Based on information collected by the UMass Donahue Institute Population Estimates Program ("Donahue Institute"), the population is expected to increase 2.7% by 2020 and by an additional 6.5% by 2030, when the projections show an expected population of 9,158. The Donohue Institute data projects a total population increase of 14.9% from 2000 to 2030 as seen below. The pediatric population is projected to grow more significantly with a 16.1% increase from 2010-20 and a 6% increase from 2020-2030 as shown below. As noted below, the usage overall is quite low and as a result, and as discussed below, the Applicant intends to close the dedicated Pediatric service, upon compliance with required processes.

Nantucket Cottage Hospital Primary Service Area Growth Trends[2]

	2000[3] (Actual)	2010 (Actual)	% Increase	2020 Projection	% Increase	2030 Projection	% Increase	% Increase 2000-30
Total Nantucket	7,971	8,368	5.0%	8,596	2.7%	9,158	6.5%	14.9%
Ages 0-19	586	2,262	286%	2,628	16.1%	2,787	6%	376%

The data above represents the year round resident population of Nantucket however, the island is also home to many seasonal residents not counted by the Census Bureau[4] which are estimated to be approximately 55,000, or 6.6 times greater, not including weekly visitors. The seasonal residents as well as other visitors to the island are also served by the Applicant as evidenced by 12% of NCH's discharges being non-residents.

With population growth, demand for efficient high quality healthcare is expected to grow. The Applicant has therefore concluded that the population growth projections of its PSA and the influx of seasonal residents and visitors support the proposed Project.

2. Physical Plant Issues

The main structure of the existing facility was constructed in 59 years ago. Fifty-six years ago, the building was remodeled and a new wing was added. The facility again underwent renovations in 2000, which was the last time any major work occurred at the Hospital. The existing footprint cannot accommodate further expansion of the building.

Some examples of issues associated with the layout of the Hospital are briefly described below.

[2] See UMass Donahue Institute Population Estimates Program, at http://pep.donahue-institute.org/.
[3] See "Fact Finder". United States Census Bureau. Retrieved April 19, 2016.
[4] In 2010, 58% of all housing units in Nantucket were considered vacant/seasonal units. *See Long-term Population Projections for Massachusetts Regions and Municipalities* prepared by the Donohue Institute for the Office of the Secretary of the Commonwealth of Massachusetts in March of 2015.
http://pep.donahue-institute.org/downloads/2015/new/UMDI_LongTermPopulationProjectionsReport_2015%2004%20_29.pdf

- The imaging department is disjointed, not contained in a defined area, lacks a central hallway, and has little patient privacy.

- The obstetrics service is not adjacent to the operating room, where C-sections are performed, resulting in the need for those obstetrics patients to be transported through other areas of the Hospital on the way to the operating room.

- The emergency department is undersized and overcrowded.

- Outpatient departments are fragmented into small groups that are physically separated from one another within the physical plant. This results in operational inefficiencies and demands higher staffing since each department must have appropriate administrative and clinical staff to accommodate patients.

Other than NCH's computerized tomography ("CT") clinical space the other clinical spaces, including patient rooms and exam rooms, are undersized based on current standards. The existing operating room does not meet current architectural square footage requirements, its infrastructure cannot accommodate new, evolving operating room technology. In addition, with only one operating room, there is no back up room available in the event of an emergency.

The exterior envelope of the Applicant's facility is compromised structurally in some areas and repairs are financially impractical since the shingles covering the exterior contain asbestos that would require costly appropriate remediation. Additionally, the windows throughout are single-pane and not energy efficient and the roof needs replacement.

NCH's mechanical systems are at the end of their useful life. The plumbing system is comprised of original equipment that is encased in asbestos and replacement would require costly abatement measures. The Hospital's electrical system is outdated and difficult to repair as many of the system's components are no longer manufactured. The hot water system includes a water storage tank from the 1960s that has no redundancy. These repairs pose a significant risk due to the Applicant's sole provider status and geographic isolation on the island of Nantucket where there are few resources available to repair or replace such systems in the event of an emergency.

3. Utilization and Demand

The overall occupancy rates for NCH are lower than average for a community hospital. This is attributable to several factors including the need to be able to accommodate large seasonal variations in demand, particularly during the summer, and the Applicant's inability to use all beds due to the need to block beds in multi-bed rooms for issues such as acuity, infection control, and gender.

Medical/Surgical	FY 2013[5]	FY 2014[6]	FY 2015[2]

[5] Source: Applicant- FY 2013 information is based on NCH's FY 2013 403 cost report Schedule 2.3. The FY 2013 cost report erroneously reflected the Hospital's medical/surgical bed (m/s) count as 11 when in FY 2013 it was licensed for 12 m/s beds, making NCH's occupancy rate for FY 2013 higher than subsequent years. The Applicant notes that this explanation also is provided in Schedule 2.3.

[6] FY 2014 and FY 2015 information is based on the Applicant's cost reports as stated in Schedule 2.3. The cost reports for these two years listed the medical/surgical bed count as 15, consisting of 12 medical/surgical beds, 1 ICU bed, and 2 pediatric beds. In FY 2014 and FY 2015, the ICU and pediatric beds were used for m/s patients as necessary. For reasons such as infection control, patient

Patient Days	1,404	1,569	1,572
Patient Discharges	299	383	357
Occupancy	34.97%	28.66%	28.71%
ALOS	4.7	4.1	4.4
Obstetrics	**FY 2013**	**FY 2014**	**FY 2015**
Patient Days	399	366	456
Patient Discharges	129	122	138
Occupancy	27.33%	25.07%	31.23%
ALOS	3.1	3.0	3.3

The use of beds for observation and for long term care (swing beds) was examined, showing steady utilization and a need for these services.

Observation	**FY 2013**	**FY 2014**	**FY 2015**
Patient Days	358	354	359
Patient Discharges	278	308	302
ALOS	1.28	1.12	1.19
Swing	**FY 2013**	**FY 2014**	**FY 2015**
Patient Days	621	573	623
Patient Discharges	68	72	71
ALOS	9.13	7.96	8.7

Additionally, the use of Pediatric and ICU services was also examined. The utilization data indicate that there were less than one patient per month and neither service has experienced more than 10 patients over the five year period. As a result, the NCH has included closure of these two services in its new plans and will ask the department for a waiver during Plan Review to operate beds for pediatric purposes in one of its single–bed rooms.

Pediatric and ICU Historical Service Utilization

	2011	2012	2013	2014	2015
Pediatric Discharges	6	2	4	5	8
Pediatric ALOS	1.33	2.5	3.0	2.0	2.0
ICU Discharges	5	3	2	10	9
ICU ALOS	2.8	1.33	1.5	1.8	4.22

The Applicant reports that it refers over 300 patients per year off of the island. The main diagnostic reasons for these referrals, which are not all emergency transports, are cardiac (23%) and gastrointestinal patients (13%) patients. Others reasons are also listed below. Clearly, it would be infeasible for the PSA to support, and for NCH to maintain the full array of tertiary services.

Primary Reasons Patients Are Referred Off-Island

acuity level, and patient gender, the Applicant needed to block beds and was not able to use all available medical/surgical beds due to multi-bed room configurations. As the Applicant used beds in this way, the cost reports for FY 2014 and FY 2015 reflect the aggregate number of medical/surgical, ICU, and pediatric beds rather than the licensed number of 12 m/s beds. Occupancy rates are thus lower than if the Applicant had reported its 12 licensed m/s beds.

Diagnosis	FY 2013	FY 2014	FY 2015	YTD FY 2016
Cardiac	83	88	78	41
Pulmonary	11	13	9	7
Stroke	11	9	6	6
Trauma	11	12	15	6
Obstetrics	6	6	9	2
Gastroenterology	41	45	46	15
Neonatology	3	1	3	2
Pediatrics	28	14	12	6
Pedi BH<16	6	10	1	4
BH 16-24	12	7	7	4
BH >24	12	14	22	13
Surgery	N/A	N/A	29	17
GYN	N/A	N/A	3	3
Genito-Urinary	N/A	N/A	11	6
Oncology	N/A	N/A	9	6
Orthopedics	N/A	N/A	31	10
Neurology	N/A	N/A	23	14
Infectious Disease	N/A	N/A	2	2
Endoscopy	N/A	N/A	2	1
Other	103	134	15	4
TOTAL	**327**	**353**	**333**	**169**

The majority of referrals go to Massachusetts General Hospital and other primarily tertiary hospitals as shown below.

Hospital Name	FY 2013	FY 2014	FY 2015	YTD FY 2016
Massachusetts General Hospital	207	260	236	107
Brigham & Women's Hospital	21	9	17	7
Beth Israel Deaconess Medical Center	15	12	8	11
Boston Medical Center	13	4	8	1
Boston Children's Hospital	30	18	11	6
Cape Cod Hospital	8	11	14	15
Other	33	39	39	25
TOTAL	**327**	**353**	**333**	**169**

Transfer agreements for transporting patients off of the island, as well as referral agreements with mainland hospitals have been provided.

Lab services increased approximately 6.7%, while radiology services increased by approximately 11% during the three fiscal years indicated below. The Applicant stated that its physical plant configuration makes it particularly difficult to efficiently meet radiology demand. Utilization of the Applicant's emergency services is reflective of the yearly changes in the number of tourists and summer residents who contribute to the Applicant's patient population during the summer months.

Select Outpatient Department Utilization Indicators

	FY 2013	FY 2014	FY 2015
Emergency Department	11,319	10,044	10,411
Laboratory	92,633	96,203	98,809
Radiology*	14,516	14,974	16,122

*Represents all radiology services

Staff analyzed seasonal shifts in the utilization of key inpatient and outpatient services by averaging and comparing the two slowest months in winter with the two busiest in summer for three years and found that many services experience wide variations in utilization from the peak of July-August to the low of January-February, as shown below. A greater seasonal variation has occurred in the use of outpatient services such as dialysis, observation, and the emergency department. Additionally, the seasonal variation from one year to the next is not consistent across all services. Imaging has decreased while infusion and chemotherapy have gone up and down depending on the summer.

Seasonal Variation in Utilization of Key Services at NCH*				Average Annual 3 Year Growth Rate**
	2013	2014	2015	
In Patient DC	72.9%	50.0%	21.3%	18%
Observation	37.0%	163.6%	57.8%	8%
Emergency	60.2%	47.0%	5.7%	-5%
Radiology	3.7%	-5.3%	-19.6%	5%
Chemotherapy	152.6%	56.0%	-15.2%	27%
Infusion	183.3%	129.0%	0.0%	35%
Dialysis	41.3%	-22.1%	75.6%	-22%
* Variation Between Jan-Feb and Jul- Aug ** Average Of Total Annual Volumes				

The three years of average annual growth rate of total volume is also included in the table above. NCH is projecting a modest increase in demand for outpatient services of 2.4% annually following project implementation in 2019. This is supported by staff analysis of the actual average three year annual growth rate.

In Summary, while NCH does expect greater efficiencies with the new physical plant configuration including single bed rooms, contiguous ORs to obstetrics, consolidated ancillary services for both in- and out-patient services, as well as modern efficient infrastructure, the applicant does not expect a significant increase in utilization of med/surg beds or of pediatric demand.

Based on the projected population growth and the utilization data, and taking into account the significant divergence in usage between on- and off-season, staff finds these projections to be reasonable and that the applicant meets the health care requirements standards of the DoN Regulations.

C. Operational Objectives

NCH reports that it utilizes various quality improvement programs to ensure the delivery of high quality health care services to its patients. It adheres to Joint Commission on Accreditation of Healthcare Organizations (JCAHO") standards for collecting data, monitoring information and analyzing outcomes. Prior to implementing process changes, the Applicant applies a system called "Plan-Do-Study-Act" that allows it to test process changes using a study phase to examine results and determine the efficacy of the change prior to system-wide implementation.

Through its committees, the Applicant is able to coordinate, develop and implement an effective Performance Improvement Plan ("PIP"). The Patient Care Assessment Committee (PCAC") monitors and reports on quality care and performance and ensures the organizational performance improvement efforts are fulfilled and consistent with NCH's mission and strategic goals. The Quality Committee works to improve patient outcomes through reporting of adverse events, and developing patient safety and risk management initiatives and plans to ensure there is progress on the PIP. Other relevant committees that work in concert with the PCAC are the Medical Staff, Safety, Administration and Hospital Community Committees.

NCH stated that it will continue to offer services to patients who are poor, medically indigent, and/or Medicaid eligible and to care for all patients in a non-discriminatory manner.

The Applicant has provided referral agreements with NCH Palliative and Supportive Care of Nantucket and Our Island Home. Additionally, it has provided a copy of an Emergency Medical Service Agreement between the US Coast Guard, Boston Medflight, Martha's Vineyard Hospital and Nantucket Cottage Hospital regarding emergency Coast Guard transportation between medical facilities elaborating on the collaboration among the parties.

Staff notes that the Department's Office of Health Equity ("OHE") conducted a review of the policies and operations of the existing language access services at NCH on August 17, 2016. OHE believes that it is critical that culturally appropriate language access services are available for new and expanded clinical services. Therefore, in order to ensure an appropriate level of service for limited English proficient patients in need of treatment at the Hospital, OHE established 17 requirements on the Applicant's language access services which are set forth as a condition of approval and detailed in Attachment 1.

Based on the above analysis, Staff finds that the proposed project, with adherence to a certain condition, meets the operational objectives requirements of the DoN regulations.

D. Standards Compliance

As indicated previously, the proposed NCH facility replacement project involves new construction of 106,302 GSF on the existing site and no renovation. The existing facility encompassing 53,089 GSF will be demolished after the new facility is licensed and fully operational.

The current physical facility is undersized relative to modern square footage and architectural requirements. This limits the Applicant's ability to provide certain equipment and services whose space requirements cannot be met in the existing building. The construction of a new hospital building will allow the Applicant to address all physical plant deficiencies and complies with present standards. These changes will improve patient privacy and operational efficiency, while allowing the Applicant to adapt to evolving changes in the delivery of health care services.

NCH confirmed that the new construction will meet all applicable standards and regulatory requirements for hospital licensure including staffing requirements and any plan review requirements of the Division of Health Care Safety and Quality.

Based on the above information provided by the applicant, Staff finds that the proposed project meets the standards compliance factor of the DoN regulations.

E. Reasonableness of Capital Expenditures

The table below shows the requested and recommended maximum capital expenditure of $85,459,639 (May 2016 dollars).

Total Land Costs	$ -
Construction Costs:	
Construction Contract	70,039,876
Fixed Equipment NOT in Contract	3,500,000
Architectural Cost	8,581,512
Pre-filing Planning & Development	50,000
Post-filing Planning & Development	50,000
Abatement, Monitoring, FF&E	2,560,000
Net Inter. Exp. during Construction	-
Major Movable Equipment	-
Total Construction Costs	$84,781,388
Cost of Securing Financing	678,251
TOTAL	$85,459,639

Staff compared the requested base construction costs with the most recent Marshall & Swift Valuation Service comparison Class A "Excellent" for Hospital construction. As shown below, NCH's projected construction costs are 11% above the Marshall Valuation after staff applied the regional and local multipliers.

	New Construction
Proposed GSF	106,302
Construction Contract	$70,039,876
Site Survey & Soil Investigation	-
Architectural & Engineering Costs	8,581,512
Fixed Equipment not in Contract	3,500,000
Total Construction Costs	$82,121,388
Marshall & Swift Comparison Costs	$696.43
NCH Cost per FT SQ	$772.53
Difference	$76.10
Variance	**11%**

The Applicant notes that its construction costs are higher due to its island location since all construction and supplies for the replacement building must be shipped there by boat. Furthermore, the Applicant is one of the state's smallest hospitals and has a higher concentration of specialty areas, such as labs and x-ray with higher mechanical and related costs. This also results in higher costs than for a comparable mainland hospital.

Staff finds that, these costs are reasonable based on the above explanation, and the construction costs of recently approved projects, as shown below.

Hospital	Project #	Filing Date	Cost/GSG
Mass. General	4-3C45	Aug-15	$1335
South Shore	4-3C42	May-15	$763

Incremental Operating Costs

The incremental operating costs comparing project approval to project denial are below.

	Incremental Operating Costs
Salaries, Wages	$2,603,996
Fringe	-
Purchased Services	-
Supplies & Other Expenses	($339,963)
Depreciation	$2,575,037
Interest	$0
Pension	$0
Total	$5,594,829

With the reduction in inpatient beds, staff inquired about the need for increased staffing. The applicant reports that the increases in staffing (detailed below) are related to its plans to gain Rural Health Clinic classification. At present, the Applicant's primary care physician offices are located outside of NCH licensed clinical space and they bill independently from the Hospital. However, they are subsidized by the hospital. The replacement facility will allow the Applicant to consolidate these practices into licensed hospital space, making the physicians employees of the hospital, and allowing them to work with nurse practitioners and physician assistants employed by the hospital, as a Rural Health Clinic.,This will result in higher reimbursement ratesfrom CMS based on the Rural Health Clinic status designation, the elimination of the annual practice subsidy NCH gives to these physicians, and the gain from associated billing, thereby achieving cost efficiencies.[7]

Net Staffing Changes

Personnel category	Change
RN	11.25
Technician & Specialist	0
Professional	2
Service:	0
Clerical	8
Physicians	7
Non RN	0

[7] Staff is informed by the Applicant that this will have no effect on the Rural Floor.

Total	28.25

Based on the information provided by the applicant and staff analysis, staff finds the incremental operating costs to be reasonable.

F. Financial Feasibility

The Applicant states that the Nantucket community has been highly committed and generous in supporting this project, with donors signing pledges and cash donations. To date, 87% of the funds have been raised. The table below details its fundraising efforts as of August 5, 2016.

	$ Current*	Goal	%
Cash (Donations and Pledge Payments)	$16.9		
Pledge Balance (Including Planned Gifts)	41.6		
Total Gifts and Pledges Committed	58.5		
Verbal Commitments	9		
Total Gifts Verbal and Written	$67.5	$79	85%
MGH Contribution	10		
Total	**$77.5**	$89	87%

* millions

Massachusetts General Hospital, as the owner of the Applicant, has contributed $10M and has agreed to address any cash flow requirements associated with the timing of the pledge payments, and will accept any risk if the project is approved before the final 13% is raised.
Based on this information provided by the applicant, Staff finds the costs associated with the Project are within the Applicant's financial capability as a result of its fundraising efforts and commitments from its affiliates.

G. Relative Merit

Given the age and inefficiencies of the existing facility the applicant considered multiple options.

1. Take No Action- The Applicant did not think that continuing to operate the facility in its present condition with the same level of services was a viable option. Piecemeal repairs of the outdated infrastructure of the facility have become prohibitively costly to repair and maintain; more so than on the mainland given the difficulty of obtaining parts for repairs. Much of the building is non-compliant with current hospital building standards and operations are inefficient with noncontiguous services.

2. Renovate the Existing Facility- A major renovation would have involved a substantial logistical and financial undertaking, due in part to asbestos remediation, while not addressing all of the Applicant's concerns. The Applicant would not gain needed square footage due to the space limitations of the existing building and its inability to expand its footprint. The physical plant limitations would continue to hamper the operations of the Hospital and its ability to offer modern, current treatments for medical conditions Phased renovations would disrupt patient care delivery and would not significantly decrease the operating inefficiencies among the Hospital's services.

3. Replacement Facility- The new facility and infrastructure will be more cost-effective to operate and will address the service delivery needs of a modern healthcare facility. Private rooms, now the standard of care for infection control, privacy and efficiency reasons will enable a fuller occupancy. Workflow will be improved with logically placed contiguous departments and flexible space usage. A new ER will enable better triaging of patients and new larger radiology and two OR's will enable utilization of state of the art medical equipment. The entire facility will be brought into compliance with no disruptions patient care delivery. For these reasons, the applicant determined that this option was the superior alternative.

Staff finds that the project meets the relative merit requirements of the DoN regulations.

H. Environmental Impact

Staff notes that NCH has submitted the LEED c4 for BD+C: Healthcare checklist ("Checklist"), the most updated version from the US Green Building Council, to demonstrate its commitment to green building standards for the proposed project. The Checklist (Attachment 2) shows that the proposed new facility will achieve 55 out of a possible 110 credit points, meeting the minimum 50% compliance standard of the Department's DoN Guidelines for Environmental and Human Health Impact ("Environmental Guidelines"). NCH reports that it will continue to explore the possibility of achieving an additional 15-20 credit points through the design and construction process and leverage the intended environmentally sound design and construction planning.

Based on the above information, Staff finds that NCH meets the environmental requirements of the DoN regulations.

I. Community Health Initiatives

Nantucket Cottage Hospital has agreed to provide a total of $4,272,982 (December 2015 dollars) to fund community health service initiatives described in Attachment 3. It will be distributed over five (5) years at $854,596.40 per year. Funding is available upon two contingencies: 1) approval of this project by the Public Health Council and 2) the conclusion of the Community Health Improvement Plan (CHIP) planning process with anticipated start date of December 2017. Staff recommends the funding of these initiatives as a condition of approval.

Based on the above information, Staff finds that the applicant meets the community health service initiatives requirements of the DoN regulations.

III. STAFF FINDINGS

Based upon the foregoing analysis, Staff finds the following:

1. NCH Hospital Boston proposes to construct a replacement facility encompassing 106,302 GSF of new construction.

2. The health planning process was satisfactory and consistent with the DoN regulations.

3. The project meets the health care requirements provisions of the DoN regulations.

4. The project meets the operational objectives of the DoN regulations.

5. The project meets the compliance standards of the DoN regulations.

6. The Applicant shall continue to provide language access services at NCH and will implement the requirements described in the document prepared by the Office of Health Equity ("OHE"), as amended from time to time by agreement of the Applicant and OHE, which is attached hereto as Attachment 1 and is incorporated herein by reference.

7. The proposed and recommended maximum capital expenditure of of $85,459,639 (May 2016 dollars) is reasonable, based on similar, previously approved projects.

8. The proposed and recommended incremental operating cost of $5,594,829 (May 2016 dollars) is reasonable based upon similar, previously approved projects.

9. The project is financially feasible and within the financial capability of the applicant.

10. The project meets the relative merit provisions of the Regulations.

11. The project meets the requirements of the DoN Green Guidelines.

12. The project, with adherence to a certain condition, meets the community health service initiatives of the DoN regulations.

STAFF RECOMMENDATION

Based upon the foregoing analysis and findings, Staff recommends approval with conditions of Project Number 5-3C53 submitted by Nantucket Cottage Hospital for the construction of a replacement facility. Failure of the Applicant to comply with the conditions may result in Department sanctions

1. NCH shall accept the maximum capital expenditure of $85,459,639 (May 2016 dollars) as the final cost figure, except for those increases allowed pursuant to 105 CMR 100.751 and 100.752.

2. NCH shall contribute 87% in equity from funds raised.

3. NCH shall continue to provide services to patients who are poor, medically indigent, and/or Medicaid eligible and will care for all patients in a non-discriminatory manner.

4. NCH shall adopt the requirements of the Office of Health Equity for improvement of policies and procedures related to language access for non-English or limited English proficient ("LEP") patients as detailed in Attachment 1 of this Staff Summary.

5. NCH shall achieve green building certification at the silver level or better. (Attachment 2)

6. NCH shall contribute a total of $4,272,982 (May 2016 dollars), or $854,596.40 per year for a period of five years, to fund the community health services initiatives (CHI) and detailed in Attachment 3 of the Staff Summary.

The Applicant has agreed to these conditions.

Attachments

1. Office of Health Equity
2. Green Guidelines
3. CHI