



STATE OF ILLINOIS

# HEALTH FACILITIES PLANNING BOARD

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DOCKET NO: A - 19	BOARD MEETING: December 17, 2003	PROJECT NO: 03-049	PROJECT COST: Original: \$ 81,396,198 Current:
FACILITY NAME: Mercy Crystal Lake Hospital & Medical Center		CITY: Crystal Lake	
TYPE OF PROJECT: Substantive			HSA: VIII

**PROJECT DESCRIPTION:** The applicants propose to construct and establish a 70-bed hospital which will contain 56 medical/surgical, 10 obstetric and four intensive care beds. The applicants also propose to construct a clinic connected to the hospital to house physician offices.



Rod R. Blagojevich, Governor  
Eric E. Whitaker, M.D., M.P.H., Director

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## STATE AGENCY REPORT

Mercy Health Systems Corporation and  
Mercy Crystal Lake Hospital and Medical Center, Inc. d/b/a  
Mercy Crystal Lake Hospital and Medical Center  
Crystal Lake, Illinois  
Project #03-049

### I. The Proposed Project

The applicants propose to establish a 70-bed hospital which will contain 56 medical/surgical ("med/surg"), 10 obstetric ("OB") and four intensive care ("ICU") beds. The applicants will also construct a clinic connected to the hospital to house physician offices. The hospital will contain 160,408 gross square feet ("GSF") and the clinic will contain 86,447 GSF. The total estimated project cost is \$81,396,198.

### II. Summary of Findings

- A. The State Agency finds the proposed project does not appear to be in conformance with the provisions of Part 1110.
- B. The State Agency finds the proposed project does not appear to be in conformance with the provisions of Part 1120.

### III. General Information

The applicants are Mercy Health Systems Corporation and Mercy Crystal Lake Hospital and Medical Center, Inc., d/b/a Mercy Crystal Lake Hospital and Medical Center, located in Crystal Lake (HSA VIII). The proposed facility will be located in the A-10 hospital planning area ("HPA"). There are three providers of acute care services in A-10. Two of these providers are located within 30 minutes travel time of the applicants' proposed facility. Also, there are four other acute care providers located within 30 minutes travel time of the applicants' proposed facility. These four providers are located in other HPAs, however. Table One list the acute care providers in A-10.

The State Agency notes the following item for State Board consideration. To clarify specific issues of this project, staff contacted the applicants and requested measurable architectural floor plans and site plans. These were requested to clarify the nature of the project and to

<b>TABLE ONE</b>			
<b>Acute Care Providers Located in the A-10 Hospital Planning Area</b>			
Hospital	Location	Distance (in miles) from Applicants' Proposed Site	Travel Time (in minutes) from Applicants' Proposed Site
Harvard Community Hospital	Harvard	25.6	43
Memorial Medical Center	Woodstock	8.2	16
Northern Illinois Medical Center	McHenry	7.3	11

validate gross square footage and unit construction costs. The applicants submitted schematic design drawings of the site and floors in a CAD (computer-aided design) format, which permits measurement and detailed review. It is noted that these drawings are, by definition, not a finalized representation of the construction project, but are at a stage that they do develop architectural / engineering concept to a level where key rooms, circulation, departmental space and overall "constructability" of the program has been tested.

In an overall review of the submitted documents, the findings are as follows:

1. Developed square footage has been validated, including the overall construction as well as the reviewable departments.
2. Developed "key rooms" (e.g., number of operating rooms, bed rooms, recovery stations, etc.) within the departments are consistent with programmatic intent.

Copies of the applicants' drawings are attached to this report.

This is a substantive project which is subject to both a Part 1110 and Part 1120 review.

A public hearing was held on September 29, 2003. A copy of this report and the corresponding transcript from this hearing are attached. Additionally, the State Agency received approximately 1,900 letters regarding this proposal. Approximately 1,200 of these letters expressed support for the project; while approximately 700 letters expressed opposition. Due to the volume of correspondence received, these letters are not included in the State Board's material. These letters, however, are available for review at the State Board's office in Springfield.

Project obligation will occur after permit issuance. The anticipated project completion date is August 31, 2006.

Table Two outlines the proposed bed capacity of the hospital.

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<b>TABLE TWO</b>	
<b>Proposed Beds by Category of Service</b>	
Category of Service	Beds Proposed
Medical-Surgical	56
Obstetrics	10
Intensive Care	4
<b>Total</b>	<b>70</b>

**IV. The Proposed Project - Details**

The applicants propose constructing a new 70-bed hospital with an attached physician clinic building Crystal Lake. The facility will be located on a 16-acre plot of land located on the east side of State Route 31 between Three Oaks Road and Raymond Road. The facility will contain 70 beds consisting of 56 med/surg, 10 OB and four ICU. The physician clinic building will contain space for 45 physicians. These physicians will be employees of the hospital. The applicants indicate they will initially finish out 32 of the proposed 70 beds when the facility is opened. The applicants indicate the space for the remaining 38 beds will be built but shelled out. The ancillary and support services necessary to operate the 70 bed facility will be constructed initially. The hospital will contain 160,408 GSF of new construction and the attached physician clinic building will contain 86,447 GSF. Table Three outlines the proposed sizes of the departments in the hospital and physician clinic building. This table includes both reviewable and non-reviewable areas.

<b>TABLE THREE</b>	
Department / Area	Proposed GSF
<b>Reviewable Areas - Hospital Portion</b>	
Med/Surg	32,412
OB	4,760
ICU	2,385
Newborn Nursery	1,513
Emergency	6,855
Laboratory	2,881
Radiology	9,900
Physical & Occupational Therapy	1,474

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<b>TABLE THREE</b>	
<b>Department / Area</b>	<b>Proposed GSF</b>
Central Processing	1,260
Dietary	3,780
Pharmacy	840
Respiratory Therapy	623
Cardiac Rehabilitation	1,200
Surgery	9,840
Recovery	2,040
Outpatient Surgery	5,182
Labor Delivery Recovery Rooms	1,974
<b>Total Reviewable GSF</b>	<b>88,919</b>
<b>Non Reviewable Areas - Hospital Portion</b>	
Building Systems	15,506
Public Circulation	22,725
Admin/Business Office	3,437
Material Management	4,150
Building Support	5,455
Employee Facilities	1,163
Medical Library	750
Housekeeping	726
Laundry Holding	479
Medical Records	4,373
Snack Shop	1,147
Yard Storage	336
Human Resources	832
Marketing	1,360
Meeting Rooms	1,121

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<b>TABLE THREE</b>	
<b>Department / Area</b>	<b>Proposed GSF</b>
Ambulance Garage	982
Canopies	6,947
<b>Total Non Reviewable GSF</b>	<b>71,489</b>
<b>Total Hospital GSF</b>	<b>160,408</b>
<b>Physician Clinic Building</b>	
Building Systems	8,171
Medical Records	7,832
Waiting	6,389
Food Court	2,550
Public Circulation	17,470
Physician Offices	44,035
<b>Total Physician Clinic</b>	<b>86,447</b>
<b>TOTAL GSF Proposed</b>	<b>246,855</b>

**V. Project Costs and Sources of Funds**

The proposed project is being funded with cash and securities of \$12,036,198 and \$69,360,000 from a bond issuance. Table Four outlines the project's costs and sources of funds.

**VI. Bed Related Review Criteria**

**A. Criterion 1110.320(a) - Establishment of Additional Hospitals**

The proposed hospital will be located within a Metropolitan Statistical Area. Therefore, the applicants are required to establish a hospital with a minimum of 100 med/surg beds. The applicants propose 56 med/surg beds. This is not in conformance with the requirements of this criterion.

**THE STATE AGENCY FINDS THE PROPOSED PROJECT DOES NOT APPEAR TO BE IN CONFORMANCE WITH THE ABOVE REVIEW CRITERION.**

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<b>TABLE FOUR</b>	
<b>Use of Funds</b>	<b>Amount</b>
Preplanning costs	326,380
Site Survey and Soil Investigation	12,050
Site Preparation	2,340,000
Off-Site Work	252,100
New Construction Costs	47,222,358
Contingencies	2,468,720
Architectural and Engineering Fees	2,911,700
Consulting and Other Fees	88,200
Movable or Other Equipment	18,145,090
Bond Issuance Expense	1,360,000
Net Interest Expense	6,269,600
<b>TOTAL</b>	<b>\$ 81,396,198</b>
<b>Source of Funds</b>	<b>Amount</b>
Cash & Securities	12,036,198
Bond Issuance	69,360,000
<b>TOTAL</b>	<b>\$ 81,396,198</b>

B. Criterion 1110.320(b) - Allocation of Additional Beds

This criterion states the following:

“The applicant proposing to establish a category of service must document that access to the service will be improved. Documentation shall consist of at least one of the following:

- A. the proposed service is not available within the planning area;
- B. existing facilities have restricted admission policies resulting in access limitations;
- C. existing service providers are experiencing occupancy levels in excess of category of service target levels;
- D. the travel time to existing service providers is excessive (exceeds 45 minutes) for area residents to be served by the project.”

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The proposed hospital will provide med/surg, OB and ICU inpatient services. There are currently three other providers of acute care services in the A-10 planning area, all of which are located within 45 minutes travel time of the proposed facility. Two of these providers are located within 30 minutes travel time of the applicants' proposed facility. The existing hospitals provide the three acute care services proposed by the applicants. Thus, the applicants do not meet the first requirement of this criterion. The applicants have not documented that any of the existing facilities have restrictive admission policies. Thus, the applicants cannot meet the second requirement of this criterion.

The State Board's target utilization for the med/surg service is 80% (for hospitals with 1-100 beds), 85% (for hospitals with 101-199 beds) and 90% (for hospitals with 200 or more beds). The target utilization for the ICU service is 60% regardless of the number of beds in the facility. Finally, the target utilization for the OB service is 60% (for hospitals with OB units with 1-10 beds, 75% for hospitals with OB units with 11-25 beds and 78% for hospitals with OB units of 26 or more beds). As noted, there are six acute care providers within a 30 minute drive time of the applicants' proposed site. Table Five displays the utilization for the above-referenced services at these hospitals. As shown in Table Five, only one provider (Memorial Medical Center - Woodstock) met the target utilization for the med/surg service. The other five providers did not meet this requirement. Also, none of the providers met the target utilization for the OB service. However, all six facilities experienced high utilization for the ICU service. The third requirement is met, but only for the ICU service. Since existing providers are not at the target utilization levels for all services proposed, the applicants cannot meet the third requirement of this criterion.

The fourth requirement is to document that travel time to existing providers is excessive (exceeding 45) minutes). All three of the hospitals in A-10 are located within 45 minutes travel time of the applicants' proposed site (see Table One). The applicants provided a traffic study which identifies a travel time to Memorial Hospital (Woodstock) of between 16-24 minutes and a travel time to Northern Illinois Medical Center (McHenry) of between 9-15 minutes. The third facility, Harvard Memorial Hospital is further from the proposed site, but is located within 45 minutes travel time. In addition to these facilities identified by the applicants, the State Agency identified three additional acute care providers that are also located within a 30-minute travel time of the proposed site. These three additional hospitals were not included in the applicants' traffic study. Since there are existing providers within a 45-minute travel time, the applicants cannot meet the fourth requirement of this criterion. These six facilities are referenced in Table Six.

**THE STATE AGENCY FINDS THE PROPOSED PROJECT DOES NOT APPEAR TO BE IN CONFORMANCE WITH THE ABOVE REVIEW CRITERION.**

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<b>TABLE FIVE</b> <b>Acute Care Hospitals Located within 30 Minutes Drive Time of the Applicant's Proposed Site</b> <b>Statistical Data for Med/Surg, Obstetric and Intensive Care Services</b> <b>Calendar Year 2001</b>						
Hospital	ICU	ICU Beds	Med/Surg	Total Beds	OB	OB Beds
Good Shepherd Hospital	85.3%	10	73.4%	158	72.9%	24
Memorial Medical Center	78.7%	8	82.1%	77	58.3%	10
Northern Illinois Medical Center	66.5%	18	76.3%	177	48.5%	19
Provena St. Joseph Hospital	73.0%	8	67.0%	260	27.1%	20
St. Alexius Medical Center	99.8%	19	80.4%	346	65.4%	28
Sherman Hospital	70.2%	26	65.9%	361	66.2%	24
	ICU		Med/Surg		OB	
Patient Days	23,217		164,203		27,270	
Beds	89		922		125	
Average Daily Census	64		450		75	
Occupancy	71.5%		48.8%		59.8%	
Source: Illinois Department of Public Health - Center for Health Statistics.						

<b>TABLE SIX</b> <b>Acute Care Hospitals within a 30 Minute Drive Time to Applicant's Proposed Facility</b>				
Facility	Location	Hospital Planning Area	Distance (in miles)	Travel Time (in minutes)
Good Shepherd Hospital	Barrington	A-09	8.6	16
Memorial Medical Center	Woodstock	A-10	8.2	16
Northern Illinois Medical Center	McHenry	A-10	7.3	11
Provena St. Joseph Hospital	Elgin	A-11	15.6	28
St. Alexius Medical Center	Hoffman Estates	A-07	15.7	26
Sherman Hospital	Elgin	A-11	12.9	27

**VII. Review Criteria Relating to Med/Surg, Pediatric, OB and ICU**

A. 1110.520(a) - Unit Size

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The applicants propose 56 med/surg, 10 OB and four ICU beds. The hospital will be located within a metropolitan statistical area (MSA). This criterion states that the minimum size for an OB unit within an MSA is 20 beds; the applicants propose a 10-bed unit. This criterion also states that the minimum size for an ICU unit within an MSA is four beds. The applicants propose a four-bed unit.

THE STATE AGENCY FINDS THE PROPOSED PROJECT DOES NOT APPEAR TO BE IN CONFORMANCE WITH THE ABOVE REVIEW CRITERION.

B. Criterion 1110.520(b) - Variances to Bed Need

The applicants state there is a maldistribution of acute care services in the area. The applicants contend that the population growth in the southern portion of McHenry County and the geographic location of existing providers make it difficult for residents in the applicants' designated service area to access needed services. Thus, the applicants claim this is a medically underserved area. Since there is no calculated bed need for most of the proposed services, the applicants are addressing this variance.

Medically Underserved Variance (1110.520(b)(2))

This criterion states the following:

- "A) the applicant must document that access to the proposed service is restricted in the planning area as documented by:
- i) the absence of the service within the planning area
  - ii) limitations on government funded or charity patients
  - iii) restrictive admission policies of existing providers
  - iv) the area population and existing care system exhibit indicators of median care problems such as an average family income level below the State average poverty level, high infant mortality or designation as a Health Manpower Shortage Area; or
  - v) the project will provide service for a portion of the population who must currently travel over 45 minutes to receive service.
- B) Documentation shall consist of location and utilization of other planning area service providers; patient location information and all applicable time-travel studies; a certification of waiting times and scheduling or admission restrictions that exist in area providers; an assessment of area population characteristics which would indicate an access problem.

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- C) The applicant must also document that the number of beds proposed will not exceed the number needed at the target occupancy rate to meet the health care need of the population identified as having restricted access.”

Medical/Surgical and ICU Beds

The applicants propose 56 med/surg beds and four ICU beds. The current update to the Inventory of Health Care Facilities and Services and Need Determinations (dated November 15, 2003), indicates an excess of 35 med/surg beds and seven excess ICU beds in A-10. The Inventory also shows a calculated need for 23 additional OB beds. Table Seven displays the current calculated bed need in A-10 for the services proposed by the applicants.

TABLE SEVEN Calculated Bed Need for Med/Surg, OB and ICU Services Hospital Planning Area A-10				
Category of Service	Current Number of Beds	Calculated Bed Need	Beds	
			Needed	Excess
Med/Surg	188	153		35
OB	29	52	23	
ICU	29	22		7

Data as of November 15, 2003.  
 Source: Illinois Department of Public Health - Center for Health Statistics.

The applicants submitted the required map of the planning area providers and indicated in their study that the travel times to Memorial Medical Center (Woodstock) and Northern Illinois Medical Center (McHenry) are less than 30 minutes. The travel time to Harvard Memorial Hospital (Harvard) is less than 45 minutes travel time. The applicants indicate there are no restrictive admission policies at any planning area facility. The applicants indicated in their study that travel times to the other planning area facilities will increase beyond 30 minutes by the year 2008. Thus, the applicants claim access in the planning area will be restricted in the future due to the projected excessive travel time. The State Agency notes that this criterion does not allow projected travel times to document access problems that may occur in the future.

The applicants based their proposed beds on the number of McHenry county residents who currently receive treatment for services in another county. It is the applicants' contention that these patients will utilize the new facility, most likely due to the number who will be referred by the 45 physicians in the applicants' clinic. The

applicants project 795 patient days for ICU for the first year of operation, or an occupancy rate of 54%. The applicants project 7,182 patient days for med/surg, or an occupancy rate of 35%. These occupancy rates do not meet the target utilization of 60% for ICU and 80% for med/surg respectively.

While it appears McHenry County has shown growth in the past few years, specifically in the area where the hospital will be located, it does not appear reasonable to assume that residents of the county will return for services. The State Agency cannot verify why the patients are seeking service in another location. There are no restrictive admission policies at any of the planning area facilities; there are two planning area facilities located within 30 minutes travel time of the applicants proposed facility; and, there are four other acute care facilities within 30 minutes travel time of the proposed site. These four additional providers are located in other hospital planning areas.

Based on the requirements of the criterion and the material submitted by the applicants, the State Agency notes the following: 1) the proposed service is not absent in the planning area; 2) there are no limitations on government funded or charity patients; 3) there are no restrictive admission policies at existing providers; 4) there are no median care problems indicated; 5) there is no indication of high infant mortality; 6) there is no indication that this area is designated as a Health Manpower Shortage Area; and, 7) residents are not traveling excessive distances (more than 45 minutes) to access needed services. As a result, it does not appear the applicants meet the requirements of the medically underserved variance.

**THE STATE AGENCY FINDS THE PROPOSED PROJECT DOES NOT APPEAR TO BE IN CONFORMANCE WITH THE ABOVE REVIEW CRITERION.**

### **VIII. General Review Criteria**

#### **A. Criterion 1110.230(a) - Location**

According to this criterion, the applicants must document that the primary purpose of the proposed project will be to provide care to the residents of the planning area in which the proposed project will be physically located and to prove that the location selected for a proposed project will not create a maldistribution of beds and services. The service area for the purposes of the location criterion is considered to be within 30 minutes travel time of the proposed facility under normal driving conditions.

The applicants state they are not using patient referrals to justify the project; rather the physicians in the proposed clinic will refer the potential patients to the hospital.

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The applicants have not submitted any physician referral letters identifying potential referrals to the hospital.

The applicants provided a map outlining their target service area and the other acute care facilities within that service area. The applicants' service area includes the communities of Crystal Lake, Algonquin, Lake-in-the-Hills and Cary. As previously noted, two facilities, located within A-10, are within 30 minutes travel time of the applicants' proposed site. The applicants' travel study indicates that the driving time to Northern Illinois Medical Center (McHenry) ranges from 9 - 15 minutes; travel time to Memorial Hospital (Woodstock) ranges from 16- 23 minutes. The applicants assert that these travel times will increase in the future (2008). However, the State Agency does not have any manner to verify this information and cannot accept projected travel times. In addition, there are four other facilities located within 30 minutes travel times that are in other hospital planning areas (see Table Five). Table Eight displays the respective utilization rates for the services proposed at area providers.

<b>TABLE EIGHT</b> <b>Acute Care Hospitals Located within 30 Minutes Drive Time of the Applicant's Proposed Site</b> <b>Statistical Data for Med/Surg, Obstetric and Intensive Care Services</b> <b>Calendar Year 2001</b>						
Hospital	Beds	Admissions	Patient Days	ALOS	ADC	Occupancy
Good Shepherd Hospital	124	9,154	33,095	3.6	91	73.1%
Memorial Medical Center	77	6,529	22,114	3.4	61	78.7%
Northern Ill. Med. Ctr.	131	10,198	33,435	3.3	92	69.9%
Provena St. Joseph Hosp.	175	5,909	24,421	4.1	67	38.2%
St. Alexius Med. Ctr.	286	11,148	49,581	4.4	136	47.5%
Sherman Hospital	343	12,251	52,044	4.2	143	41.6%
<b>TOTALS</b>	<b>1,136</b>	<b>55,189</b>	<b>214,690</b>	<b>3.9</b>	<b>590</b>	<b>51.8%</b>
Source: Illinois Department of Public Health - Center for Health Statistics.						

As seen from these tables, there is adequate inpatient capacity within 30 minutes travel time to accommodate additional patients. While it appears the purpose of the facility is to serve the residents of the area, the applicants have not documented that the beds and services will be fully utilized, nor have they documented that the establishment of the new hospital will not create a maldistribution of services.

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THE STATE AGENCY FINDS THE PROPOSED PROJECT DOES NOT APPEAR TO BE IN CONFORMANCE WITH THE ABOVE REVIEW CRITERION.

B. Criterion 1110.230(b) - Background of Applicant

The applicants provided licensure and certification information as required. The applicants have also certified that they have not had any adverse actions within the past three years. It would appear that the applicants are fit, willing and able and have the qualifications, background and character to adequately provide a proper standard of healthcare service for the community.

THE STATE AGENCY FINDS THE PROPOSED PROJECT APPEARS TO BE IN CONFORMANCE WITH THE ABOVE REVIEW CRITERION.

C. Criterion 1110.230(c) - Alternatives

The applicants must document that the proposed project is the most effective or least costly alternative.

The applicants considered these alternatives:

1. Do Nothing
2. Build a clinic in Crystal Lake and refer people requiring hospital or emergency care to the existing hospitals in Woodstock and McHenry.
3. Build a clinic in Crystal Lake and refer people requiring hospital or emergency care to our recently acquired hospital in Harvard.
4. Build an acute care general hospital in Crystal Lake appropriate in size to the unserved population.

Considering that the applicants have not adequately documented that the new hospital is needed to serve an unserved population, it does not appear the proposed med/surg and OB beds are necessary and it does not appear the proposed beds and services will be utilized at the target utilization levels. It appears the alternative of doing nothing and continuing the use of other planning facilities is the most appropriate.

THE STATE AGENCY FINDS THE PROPOSED PROJECT DOES NOT APPEAR TO BE IN CONFORMANCE WITH THE ABOVE REVIEW CRITERION.

D. Criterion 1110.230(d) - Need for the Project

This criterion reads as follows:

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"The project must be needed.

- "1) If the State Board has determined need pursuant to Part 1100, the proposed project shall not exceed additional need determined unless the applicant meets the criterion for a variance.
- "2) If the State Board has not determined need pursuant to Part 1100, the applicant must document that it will serve a population group in need of the services proposed and that insufficient service exists to meet the need. Documentation shall include but not be limited to:
  - A) area studies (which evaluate population trends and service use factors);
  - B) calculation of need based upon models of estimating need for the service (all assumptions of the model and mathematical calculations must be included);
  - C) historical high utilization of other area providers; and
  - D) identification of individuals likely to use the project.
- "3) If the project is for the acquisition of major medical equipment that does not result in the establishment of a category of service, the applicant must document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition."

1. Med/Surg

As seen from the discussion regarding the medically underserved variance, the applicants have not documented that the proposed 56 med/surg beds are needed or that they can be utilized at the target occupancy level. The State Agency indicated previously that the applicants stated that only 32 of the proposed 70 beds will be opened initially and the remaining 38 beds will be shelled out only. The State Agency cannot recommend the construction of shell space.

2. OB/Newborn Nursery

The most recent edition of the update to the Inventory of Healthcare Facilities and Services Need Determinations indicates a need for 23 additional OB beds in A-10. The applicants propose 10 OB beds.

3. ICU

As seen from the previous discussion regarding the medically underserved variance, the applicants have not documented that the

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proposed four ICU beds can be utilized at the target occupancy level of 60%. As referenced, the applicants state that only 32 of the proposed 70 beds will be opened initially and the remaining 38 beds will be shelled out only. The State Agency cannot recommend the construction of shell space.

4. LDR Rooms

The applicants based the need for the four labor/delivery/recovery ("LDR") rooms on the anticipated 600 deliveries from their target population. The applicants indicate that 82% of the pregnant women living in the zipcodes of their target service area delivered their babies outside on McHenry County in calendar year 2001. It is the applicants' assumption that 20.3% of the women of childbearing age in their target area will deliver at the new hospital. The applicants have not provided any physician referral letters to document the number of potential patients.

5. Surgery / Outpatient Surgery / Endoscopy / Recovery

The applicants propose six operating rooms, two of which will be used for endoscopy procedures. The applicants project that 83% of their target population will seek treatment at the new facility for surgery, which will yield 4,190 procedures. These procedures will produce 5,307 hours of surgery, or the need for four inpatient surgery rooms. The need for endoscopy procedure rooms was based upon 85% of the probable cases from their target area of 2,320 cases. The applicants anticipate 2,282 hours from these procedures or the need for two endoscopy rooms. If the applicants are able to retain the patients in their target area, the six surgery rooms will be utilized at target utilization levels. However if the anticipated patients do not materialize, the proposed rooms will be underutilized.

6. Emergency Department

The applicants propose 10 treatment rooms in the emergency department ("ED"). The applicants examined the ED volume from their facility in Janesville, Wisconsin, which is comparable to the proposed facility. The applicants estimate that, based on the target area population of 54,574, 20,000 ED visits will occur each year. Considering the State's guideline of 2,000 treatments per ED exam room, the projected volume would generate the need for 10 exam

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rooms. While the projected volume would fully utilize 10 exam rooms, it appears unreasonable to assume that all of the projected patients will seek treatment at the new facility.

7. Radiology

The applicants propose to provide standard radiology services with eight procedure rooms. These will include two general rooms, one fluoroscopy room, one ultra sound, one mammography unit, an MRI, CT scanner and a Bone Density procedure room. The applicants assume that volume for radiology procedures will be generated by recapturing patients who leave McHenry County for these services. If the applicants' projected patients seek radiological procedures at the hospital, then the volume will justify the procedure rooms proposed. However, it appears unreasonable to assume that all of the projected patients will seek treatment at the new facility.

8. Pharmacy / Laboratory / Central Processing / Dietary / Physical, Occupational and Respiratory Therapy / Cardiac Rehabilitation

These departments are necessary for the proper functioning of the new hospital. The State does not have target utilization guidelines for these services. However, if the applicants' projected patients use the facility, then these services will be fully utilized and are necessary. However, the State Agency is unable to assume that all of the potential patients will seek treatment at the new hospital.

9. Clinic Building

The applicants state the clinic building is needed to accommodate both the physicians and patients who will utilize the new hospital. The applicants contend that not having the clinic will hamper access to care because patients will need to travel to various locations to see their physicians and subsequently travel to the hospital to access those services.

**THE STATE AGENCY FINDS THE PROPOSED PROJECT DOES NOT APPEAR TO BE IN CONFORMANCE WITH THE ABOVE REVIEW CRITERION.**

E. Criterion 1110.230(e) - Size of the Project

This criterion reads as follows:

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"The applicant must document that the size of a proposed project is appropriate.

- 1) The proposed project cannot exceed the norms for project size found in Appendix B of this Part unless the additional square footage beyond the norm can be justified by one of the following:
  - A) the proposed project requires additional space due to the scope of services provided;
  - B) the proposed project involves an existing facility where the facility design places impediments on the architectural design of the proposed project;
  - C) the proposed project involves the conversion of existing bed space and the excess square footage results from that conversion; or
  - D) the proposed project includes the addition of beds and the historical demand over the last five year period for private rooms has generated a need for conversion of multiple bed rooms to private usage
- "2) When the State Board has established utilization targets for the beds or services proposed, the applicant must document that in the second year of operation the annual utilization of the beds or service will meet or exceed the target utilization. Documentation shall include, but not be limited to, historical utilization trends, population growth, expansion of professional staff or programs (demonstrated by signed contracts with additional physicians) and the provision of new procedures which would increase utilization."

The State Agency identified departments involved in this project which are considered clinical. Thus, they are subject to review. Of these departments, the State Agency has square footage standards for 14 areas. Table Nine displays the following departments' gross square footage. As shown in the table, the proposed sizes meet the State standards with the exception of the med/surg and surgical recovery areas.

If the applicants' projected patient volume is accepted, then most of the areas proposed are appropriately sized. The only exceptions are for the med/surg and surgical recovery areas. The applicants state that the med/surg units are oversized for several reasons. All of the patient rooms will be private rooms. The building's footprint requires a race track corridor system. This configuration requires a greater amount of GSF than a traditional corridor system. All of the rooms are universally size and can later be used for ICU or OB if necessary and; therefore, are larger. The recovery space is also slightly larger than State Agency guidelines by 240 GSF.

As referenced, the applicants propose to build out 32 of the 70 beds initially. The State Agency cannot recommend the construction of shell space, however. Because of the proposal, the State Agency is uncertain what will be the composition of the

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initial 32 beds. Considering the excess GSF in two departments and the construction of shell space, it appears the building is excessively sized.

TABLE NINE		
Department	State Standard GSF	Proposed Gross Square Footage
Med/Surg	22,456	32,412
OB	4,760	4,760
ICU	2,412	2,385
Newborn Nursery	1,520	1,513
LDR	1,975	1,974
Surgery	12,468	9,840
Recovery	1,800	2,040
Outpatient Surgery	NA	5,182
ER	7,660	6,855
Radiology	11,088	9,900
Lab	3,150	2,881
Pharmacy	840	840
Physical / Occ. Therapy	1,528	1,474
Respiratory Therapy	623	623
Central Processing	1,260	1,260
Dietary	NA	3,780
Cardiac Rehab	NA	1,200
Physician Clinic	NA	86,447

The applicants provided data indicating that they anticipate the following occupancy rates in their first year of operation of the new hospital: 35% in med/surg, 31% for OB and 54% for ICU. As stated previously, none of these occupancy levels meet the State Agency utilization targets. Also, these projections are based on the return of a high percentage of the patient volume from McHenry County which currently seeks treatment outside of the county. While it appears sensible to assume that some patients will indeed seek treatment at the new facility, it is unreasonable to presume that all of those patients projected by the applicants will return to the planning area.

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According to the applicants, the proposed physician building will not contain any clinical services. It will contain physician offices and space for necessary ancillary support services (i.e., medical records, waiting areas, etc.). Since no clinical services are proposed for the clinic building, there are no State standards for size requirements.

THE STATE AGENCY FINDS THE PROPOSED PROJECT DOES NOT APPEAR TO BE IN CONFORMANCE WITH THE ABOVE REVIEW CRITERION.

**IX. Review Criteria - Financial Feasibility**

- A. Criterion 1120.210(a) - Financial Viability
- B. Criterion 1120.210(b) - Availability of Funds
- C. Criterion 1120.210(c) - Start-Up Costs

These criteria are not applicable as the applicants have documented proof of an "A" bond rating.

**X. Review Criteria - Economic Feasibility**

- A. Criterion 1120.310(a) - Reasonableness of Financing Arrangements

This criterion is not applicable as the applicants documented proof of an "A" bond rating.

- B. Criterion 1120.310(b) - Terms of Debt Financing

The applicants provided the required statement indicating that the chosen method of financing is at the lowest net cost available.

THE STATE AGENCY FINDS THE PROPOSED PROJECT APPEARS TO BE IN CONFORMANCE WITH THE ABOVE REVIEW CRITERION.

- C. Criterion 1120.310(c) - Reasonableness of Project Cost

Preplanning costs - This is \$326,380, or 0.48% of the construction, contingencies and equipment costs. This compares favorably to the State standard of 1.8%.

Site Survey and Site Preparation - These costs total \$2,352,050, or 4.7% of construction and contingency costs. These appear reasonable compared to the State standard of 5%.

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Off Site Work - These costs total \$252,100.

New Construction - This cost is \$49,691,078 for construction costs and proportionate contingencies, or \$201.30 per GSF. This appears reasonable compared to the State Agency standard of \$267.34. The State Agency notes the construction cost includes both the hospital and clinic buildings. The applicants stated that 38 of the 70 proposed beds will not be operational when the facility opens. The GSF of the space for these 38 beds will be shelled. Thus the State Agency notes that additional construction expenditures will take place in the future should the applicants build out this shelled space. Thus, the total construction cost could be understated in the application. However based on the material submitted in the application, the construction costs fall within the State standard.

Contingencies - This cost is \$2,468,720, or 5.2% of construction costs. This is in conformance with the State standard of 10% for new construction.

Architectural and Engineering Fees - These costs amount to \$2,911,700, or 5.9% of construction and contingencies. This appears high compared to the State standard of 2.3% - 5.8%. Under the standard, the maximum allowable cost for this expense would be \$2,882,083. The applicants exceed the standard by \$29,617. Table Ten displays the State Agency's findings.

TABLE TEN Architectural and Engineering Fees		
Applicants' Costs	State Standard	Difference
\$ 2,911,700	\$ 2,882,083	\$29,617

Consulting or Other Fees - These costs total \$88,200.

Equipment - These costs amount to \$18,145,090. The applicants did not provide a breakdown of the equipment costs.

Bond Issuance Expense - This cost is \$1,360,000.

Net Interest Expense during Construction - This cost is \$6,269,600.

THE STATE AGENCY FINDS THE PROPOSED PROJECT DOES NOT APPEAR TO BE IN CONFORMANCE WITH THE ABOVE REVIEW CRITERION.

- D. Criterion 1120.310(d) - Projected Operating Costs

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The applicants project \$21,946 of annual operating costs per equivalent patient day for the first full year after project completion.

THE STATE AGENCY FINDS THE PROPOSED PROJECT APPEARS TO BE IN CONFORMANCE WITH THE ABOVE REVIEW CRITERION.

E. Criterion 1120.310(e) - Total Effect of the Project on Capital Costs

The applicants project \$421.00 per adjusted patient day in annual capital costs for the first full year after project completion.

THE STATE AGENCY FINDS THE PROPOSED PROJECT APPEARS TO BE IN CONFORMANCE WITH THE ABOVE REVIEW CRITERION.

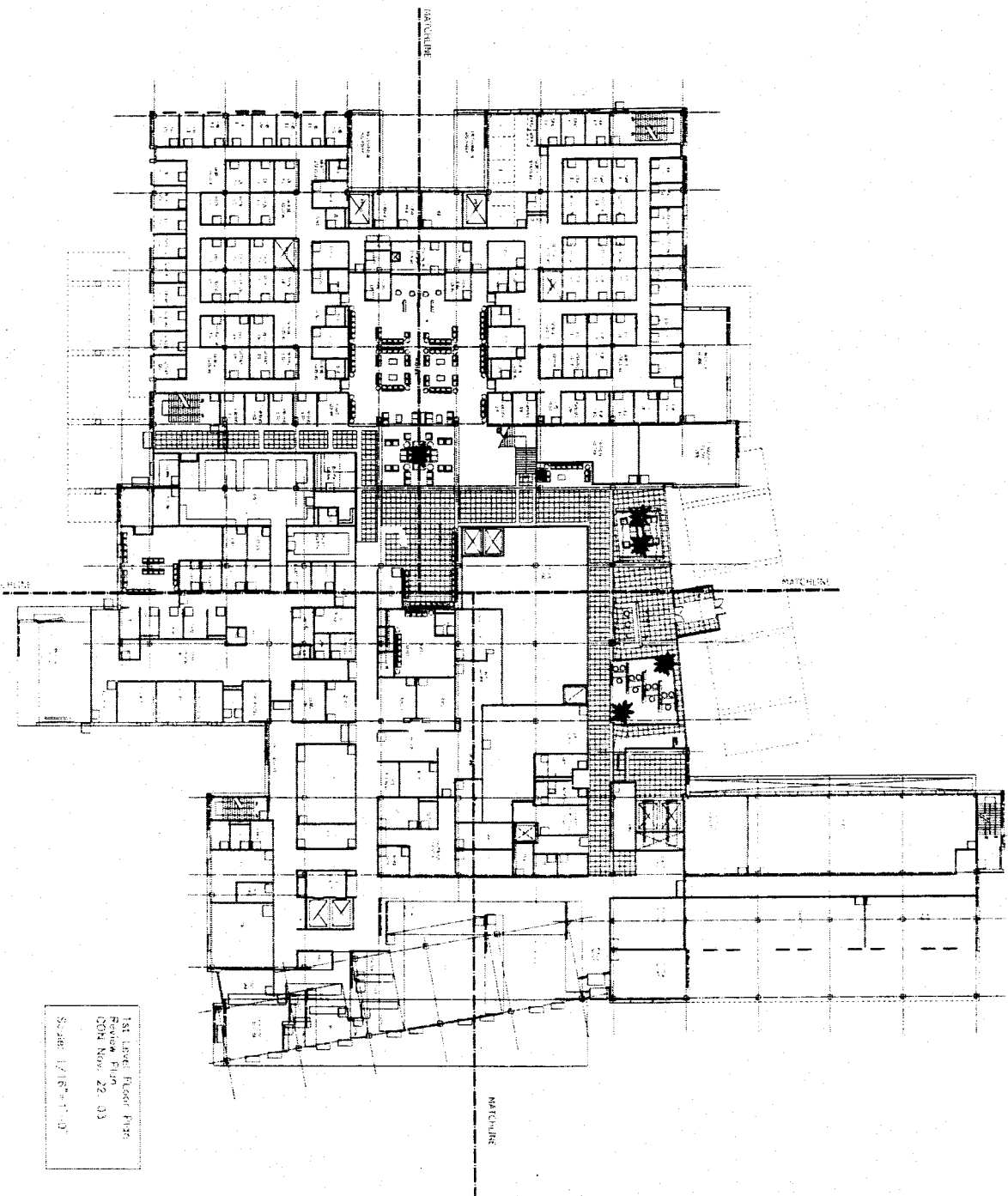
F. Criterion 1120.310(f) - Non-Patient Related Services

This criterion is not applicable.

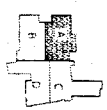
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02840





1st Level Floor Plan  
 Review Date  
 CON No. 22-03  
 Scale: 1/8" = 1'-0"



02820

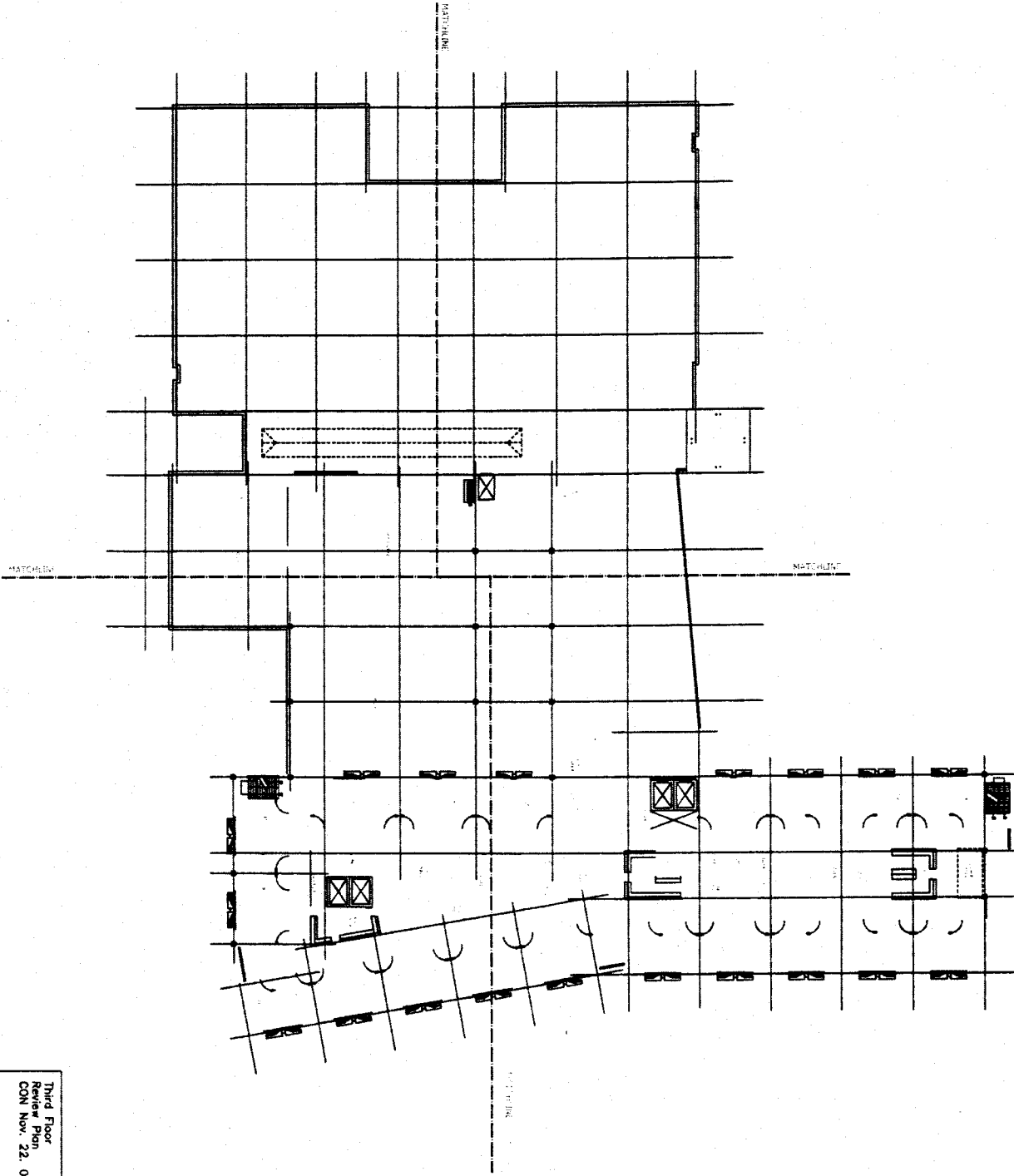
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MERCY  
 CRISTAL LAKE  
 GENERAL LEVEL LAYOUT







MATCHLINE

MATCHLINE

MATCHLINE

Third Floor  
 Room 4 Plan  
 CON NOV 22 03  
 Scale: 1/16" = 1'-0"



02844

Legend:  
 1. Room  
 2. Corridor  
 3. Stair  
 4. Elevator  
 5. Restroom  
 6. Storage  
 7. Mechanical  
 8. Electrical  
 9. Telephone  
 10. Signage

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