

**DIVISION OF HEALTH PLANNING AND RESOURCE DEVELOPMENT  
FEBRUARY 2006**

**CON REVIEW: HG-R-1205-050  
RIVER OAKS HOSPITAL, INC. D/B/A  
RIVER OAKS HOSPITAL SYSTEMS  
RIVER OAKS HOSPITAL  
RENOVATION AND EXPANSION OF ITS SURGICAL SUITE,  
ADDITION OF TEN POST ANESTHESIA RECOVERY UNIT  
(PACU) BEDS, AND RENOVATION OF SUPPORT SPACES  
CAPITAL EXPENDITURE: \$3,133,997  
LOCATION: JACKSON, HINDS COUNTY, MISSISSIPPI**

**STAFF ANALYSIS**

**I. PROJECT SUMMARY**

**A. Applicant Information**

River Oaks Hospital, Inc. is a wholly owned subsidiary of Health Management Associates, Inc. (HMA). River Oaks Hospital (ROH) is a 110-bed, short-term general acute care hospital operated and managed by HMA and governed by a fourteen (14) member Board of Trustees. River Oaks Hospital is accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and certified for participation in the Medicare and Medicaid programs.

The occupancy rates, average lengths of stay (ALOS) and the Medicaid utilization rates for the medical surgical beds at ROH are as follows for the three most recent fiscal years:

**River Oaks Hospital  
Utilization Data**

<b>Fiscal Year</b>	<b>Occupancy Rate (%)</b>	<b>ALOS (Days)</b>	<b>Medicaid Utilization Rate (%)</b>
2002	77.39	4.21	23.30
2003	89.59	4.15	27.71
2004	88.51	3.94	28.45

**Source:** Division of Health Facilities Licensure and Certification, Mississippi Department of Health, (MDH).

**B. Project Description**

River Oaks Hospital, Inc. is requesting Certificate of Need (CON) authority for renovation and expansion of a surgical suite, addition of ten post anesthesia recovery unit (PACU) beds and renovation of support spaces within the hospital. River Oaks Hospital proposes to increase the number of sterile operating rooms in the hospital from 12 to 13 rooms. The proposed project will also increase the number of beds in the post anesthesia recovery unit (PACU) from 13 to 23 beds.

The applicant indicates that the proposed project will increase the availability of operating rooms and should result in more efficient scheduling, improved timeliness of surgical intervention and recovery, and as a result, shorter lengths of stay for patients.

The applicant contends that in the main surgery department, ROH currently operates nine sterile, general purpose operating rooms, one sterile operating room for neurosurgery and orthopedic surgery, two sub-sterile operating rooms, two endoscopy procedure rooms, and one cardiac catheterization room. In adjacent space, located in the suites portion of the facility, there is one general purpose operating room, one full-time C-Section room, and one room held in reserve for emergency C-Sections.

According to ROH, the proposed project involves the following:

- Stage 1 will consist of demolition of nine outpatient rooms, nurses station, and waiting areas and converting that area into a medical/surgical and minor PACU, increasing the occupancy by ten PACU beds to a total of 23 beds. The existing PACU will be increased in size from approximately 2,000 square feet to 5,000 square feet.

Demolition of an existing satellite pharmacy adjacent to the existing prep holding area and renovation of 125 square feet for the addition of a new prep holding bed. The satellite pharmacy will be relocated in renovated space adjacent to the new PACU.

Minor renovation of the existing short stay unit, converting it into outpatient surgery (10 beds), a fast track unit (three beds), and adding a patient toilet. Work will include the addition of a new door to provide access to the emergency room. The total construction duration for Stage 1 is 160 days.

- Stage 2 will consist of demolition of approximately 950 square feet of the present PACU and corridor space constructed as part of a ROH 1999 operating room expansion project and converting it into a neurological and orthopedics operating suite with sub-sterile and equipment storage, which will allow for a second operating room dedicated to neurological and orthopedic surgery. The operating room will consist of 525 square feet. The total construction duration for Stage 2 is 60 days.

The proposed project involves 6,075 square feet of renovation within the existing hospital. According to the applicant, the following profile the renovation areas of the proposed project:

**Renovation Estimated at 6,075 square feet**

- PACU Expansion (5,000 square feet):
- Prep/Holding (125 square feet); and
- OR/Storage (950 square feet)

In addition, River Oaks Hospital states that because many of the existing mechanical systems in the surgery suites are operating at capacity, some of the systems need to be replaced or augmented. The need to upgrade these systems is a major component in the overall cost of the project. Although the applicant will increase PACU beds by 10, the applicant submits that the project entails no licensed bed increases or decreases and no change in the range or types of services offered at the hospital.

The applicant proposes a total capital expenditure of \$3,133,997 composed of renovation (58.49 percent), fixed equipment (34.09 percent), fees ( 6.94 percent), and other cost (legal and consulting fees) (0.48 percent). (See capital expenditure summary, page 9). The applicant proposes to fund the project from cash as an inter-company transfer provided by the hospital's parent company, Health Management Associations, Inc. (HMA). The application contains a letter signed by HMA's corporate controller, submitting that any and all funding or financial resources required will be provided for the proposed project.

According to the applicant, the capital expenditure for this project will be obligated upon CON approval. The applicant proposes the completion within 220 days of commencement.

The application includes a letter from the MDH Division of Health Facilities Licensure and Certification, stating that the site is acceptable for the stated use for the proposed project.

## II. TYPE OF REVIEW REQUIRED

This project is reviewed in accordance with Sections 41-7-191 subparagraph (1)(j), Mississippi Code of 1972, Annotated, as amended, and duly adopted rules, procedures, plans, criteria, and standards of the Mississippi Department of Health.

In accordance with Section 41-7-197(2), of the Mississippi Code 1972, Annotated, as amended, any affected person may request a public hearing on this project within 20 days of publication of the staff analysis. The opportunity to request a hearing expires on March 7, 2006.

## III. CONFORMANCE WITH THE STATE HEALTH PLAN AND OTHER ADOPTED CRITERIA AND STANDARDS

### A. State Health Plan (SHP)

The **FY 2006 State Health Plan** contains criteria and standards which an applicant is required to meet prior to undertaking major construction, renovation, expansion, capital improvements, replacement of health care facilities, and addition of hospital beds. This application is in substantial compliance with applicable criteria and standards.

#### **SHP Criterion 1 – Need**

River Oaks Hospital indicates that the existing design provides for only one operating room of sufficient size to adequately accommodate neurosurgery and orthopedic surgery at its facility. Because these areas are functioning at capacity or beyond their useful life, many of the mechanical systems in the department of surgery need to be upgraded, replaced, or augmented.

River Oaks Hospital indicates that orthopedic and neurosurgery can be quite different from other types of surgery in complexity, time required, and the space requirements of the operating rooms. The basic physical design of operating rooms has not changed substantially over the past century. However, major changes in technology have occurred in the last few years that influence the design requirements of these critical spaces. While typical operating rooms are a quadrangular 20 x 20 foot rooms (400 square feet), specialty surgery, such as neurosurgery and orthopedic surgery, may require rooms as large as 600 square feet.

The applicant believes that the proposed project will comply with the following objectives:

- o To prevent unnecessary duplication of health resources
- o To provide cost containment
- o To improve the health of Mississippi residents
- o To increase the accessibility, acceptability, continuity, and quality of health services aging

According to ROH, in fiscal years 2003, 2004, and 2005, the hospital conducted 8,930, 9,034, and 9,354 surgeries, respectively. This is equivalent to an annual average of 812, 821, and 850 surgeries for each sterile general purpose operating room during the three respective years. The applicant believes that based on the population growth, aging population, and the increasing incidence of surgery in GHSA III, the projected utilization of operating rooms in the area is expected to continue to increase.

The following table shows the surgery utilization for the past two years.

**ROH's Surgery Utilization (FY 2003 – FY 2004)**

	<b>FY 2003</b>	<b>FY 2004</b>
Inpatient	4,288	4,859
Outpatient	4,555	4,114
<b>Total</b>	<b><u>8,843</u></b>	<b><u>8,973</u></b>

**Source:** Application for Renewal of Hospital Licenses, MDH

**SHP Criterion 3 – Charity/Indigent Care**

River Oaks Hospital affirms that it has provided, and will continue to provide, a reasonable amount of indigent/charity care as referenced in the **Plan**.

**SHP Criterion 4 – Cost of Project**

According to ROH, the cost per square foot of this project is a little higher due to the following factors:

- o The need to upgrade and augment many mechanical systems that are currently operating at capacity or are operating beyond their useful life;

- o The requirement of conducting renovations, particularly related to system upgrades and augmentation on weekends and after hours during the week; and
- o The cost of materials and labor has increased due to the impact of the 2004 and 2005 hurricane season.

The applicant contends that the equipment cost for the proposal, including fixed, movable, and furnishings, is estimated to be \$1,068,246 and does not exceed by more than 15 percent the median costs for similar projects approved by the MDH in the most recent 12 months.

The applicant proposes to renovate 6,075 square feet of existing space at an estimated cost of \$337.57 per square foot. See Attachment I.

#### **SHP Criterion 5 – Floor Areas and Space Requirements**

- a. River Oaks Hospital indicates that orthopedic and neurosurgery can be quite different from other types of surgery in complexity, time required, and the space requirements of the operating rooms. Although the basic physical design of operating rooms has not changed substantially over the past century, major changes in technology have occurred in the last few years that are driving the design requirements of these critical spaces. While typical operating rooms are quadrangular 20 x 20 foot rooms(400 square feet), specialty surgery, such as neurosurgery and orthopedic surgery, may require rooms as large as 600 square feet.
- b. River Oaks Hospital indicates that the existing design provides for only one operating room of sufficient size to adequately accommodate neurosurgery and orthopedic surgery. Because these areas are functioning at capacity or beyond their useful life, many of the mechanical systems in the department of surgery need to be upgraded, replaced, or augmented.
- c. The applicant contends that the cost of construction materials, labor, and equipment has recently increased due to the impact of the 2004-2005 hurricane seasons.

#### **SHP Criterion 6 – Renovation versus Replacement**

River Oaks Hospital indicates that this criterion does not apply to the proposed renovation project.

### **B. General Review (GR) Criteria**

Chapter 8 of the *Mississippi Certificate of Need Review Manual, 2000 Revision*, addresses general criteria by which all CON applications are reviewed. This application is in substantial compliance with general review criteria.

#### **GR Criterion 1 – Consistency with the State Health Plan**

According to River Oaks Hospital, the proposed project substantially complies with the general and specific criteria and standards contained in the **FY 2006 State Health Plan**.

### **GR Criterion 2 - Long Range Plan**

According to the applicant, the proposed project is consistent with ROH's long range plans to provide a broad range of diagnostic and therapeutic services consistent with the needs of its patients and the overall mission of the hospital.

### **GR Criterion 3 – Availability of Alternatives**

The applicant considered the following alternative before proceeding with the proposed project:

- **Maintain status quo.** ROH contends that the hospital currently operates 11 general purpose sterile operating rooms and one neuro/ortho sterile operating room in its surgical department. Additionally, the hospital operates two sub-sterile rooms and a cardiac catheterization room also located in the surgery department. The applicant asserts that only one OR is adequately sized for neurosurgery and orthopedic surgery.

According to River Oaks Hospital, the volumes per operating room at the hospital, combined with other related factors such as the facility's experience with scheduling difficulties, delays in planned surgeries, and the frequent need to re-schedule elective surgery due to urgent or emergency surgery suggest that the status quo is inadequate to meet current needs at the facility.

Based on the inadequacies in the existing surgical department, River Oaks Hospital believes that maintaining the status quo is not an appropriate, efficient, or less costly alternative, as it relates to quality and continuity of care. For these reasons, this alternative was rejected.

### **GR Criterion 4 - Economic Viability**

The application contains a letter signed by the chief financial officer of River Oaks Hospital, attesting to the financial feasibility of this project.

River Oaks Hospital projects net operating income to be \$2,624,859 the first year, \$3,080,333 the second year, and \$3,453,397 the third year after completion of this project. See effect on operating cost, page 10.

### **GR Criterion 5 - Need for the Project**

The applicant asserts that all residents, regardless of age, gender, physical disability, ethnicity, or income status, have and will continue to have access to surgical services at River Oaks Hospital.

River Oaks Hospital indicates that the hospital's surgical volumes will increase, and additional patients for surgical services at ROH will originate from the following sources:

- Population Growth
- Population Aging
- Increasing Acceptance of Services Offered by ROH
- Increasing Surgical Incidence Rates in General Hospital Service Area III

According to ROH, in fiscal years 2003, 2004, and 2005, the hospital conducted 8,930, 9,034, and 9,354 surgeries, respectively. This is equivalent to an annual average of 812, 821, and 850 surgeries for each sterile general purpose operating room during the three respective years. The applicant believes that based on the population growth, population aging, and the increasing incidence of surgery in GHSA III, the projected utilization of operating rooms in the area will continue to increase.

The applicant asserts that the proposed project is a response to the needs of patients and the demands of members of the medical staff of ROH. River Oaks Hospital provides inpatient and outpatient surgical services among a broad range of surgical specialties. The applicant contends that this project would enable the hospital to offer patients a much more timely and continuous level of care, and effectively reduce scheduling problems, patient stress, and fragmentation of care attendant with the high volumes in the existing surgical department.

The applicant asserts that the final objective of this proposal is to ensure greater availability and accessibility of sterile operating rooms dedicated to neurosurgery and orthopedic surgery. River Oaks Hospital contends that currently, there is only one room designated for neurosurgery and orthopedic surgery. This proposal should result in improved efficiency, improved continuity of care, and ultimately improved quality of care at ROH, according to the applicant.

The applicant believes that there will be little significant impact on other area facilities providing the service. The proposal is primarily intended to accommodate existing surgeries and to ensure capacity is available for any additional growth.

The application contains seven letters of support for the proposed project, and no letters of opposition were received.

#### **GR Criterion 6 - Access to the Facility or Service**

According to ROH, all residents of the health planning service area, hospital service area, or patient service area, including Medicaid recipients, charity/medically indigent patients, racial and ethnic minorities, women, handicapped, and elderly persons have access to the existing services of ROH.

The following table shows the percentage of estimated gross patient revenue and actual dollar amount of health care provided to Medicaid and medically indigent patients for the past three fiscal years at River Oaks Hospital :

<b>Fiscal Year</b>	<b>Percent of Gross Patient Revenue</b>	<b>Dollar Amount</b>
2002	5.0	\$181,220,136
2003	4.7	\$232,860,766
2004	3.7	\$279,337,000

#### **GR Criterion 7 - Information Requirement**

River Oaks Hospital affirms that it will record and maintain the information required by this criterion and make it available to the Mississippi Department of Health within 15 business days of request.

#### **GR Criterion 8 - Relationship to Existing Health Care System**

According to the applicant, the proposed project involves only the renovation and expansion of existing surgery suite, additional post anesthesia recovery unit beds, and support spaces at River Oaks Hospital. The proposed project does not involve the offering of new health care services and therefore, the project is expected to have no adverse impact on existing facilities or services in GHSA 3.

#### **GR Criterion 9 - Availability of Resources**

According to the applicant, the project involves the addition of two (2) full-time equivalent personnel at an estimated annual cost of \$373,171. The applicant states that hospital will recruit locally and regionally, or, if necessary, rely on the assistance of its parent company to identify and recruit qualified candidates for the proposed project.

#### **GR Criterion 10 – Relationship to Ancillary or Support Services**

The applicant asserts that the surgical services function is under the supervision of the department of surgery at ROH. Therefore, there will be no change in ancillary or support services at ROH.

#### **GR Criterion 14 - Construction Projects**

According to the applicant, no new construction is involved in the proposed project.

The applicant proposes renovation of 6,075 square feet of existing space in the surgical suite and additional post anesthesia recovery unit areas of River Oaks Hospital at \$337.57 per square foot, calculated using the formula set forth in the **FY 2006 State Health Plan** (see Attachment I.) The **Means Construction Cost Data, 2005**, does not compare the cost of renovation projects.

#### **GR Criterion 16 - Quality of Care**

River Oaks Hospital is in compliance with **the Minimum Standards for the Operation of Mississippi Hospitals**, according to the Division of Health Facilities Licensure and Certification, MDH. River Oaks Hospital is accredited by the Joint Commission on Accreditation of Health Care Organizations.



**IV. FINANCIAL FEASIBILITY**

**A. Capital Expenditure Summary**

<b>Cost Item</b>	<b>Projected Cost</b>	<b>Percent</b>
Renovation	\$ 1,833,147	58.49%
Fixed Equipment	\$ 1,068,246	34.09%
Fees (Architectural, Engineering, etc.)	\$ 217,604	6.94%
Other Cost (Legal and Consulting Fees)	15,000	0.48%
<b>Total Capital Expenditure</b>	<b>\$ 3,133,997</b>	<b>100.00%</b>

The applicant proposes to renovate (6,075 square feet of existing space) and expand the surgery suite and add ten (10) post anesthesia recovery unit beds, and support spaces of ROH at an average cost of \$337.57per square foot. The **Means Construction Cost Data, 2005** does not compare the cost of renovation projects. No new construction is proposed in this project. The proposed project also involves the purchase of fixed equipment.

**B. Method of Financing**

The applicant proposes to fund the project from cash as an inter-company transfer provided by the hospital's parent company, Health Management Associations, Inc. (HMA).

The application contains a letter signed by HMA's corporate controller, submitting that any and all funding or financial resources required will be provided for the proposed project.

**C. Effect on Operating Cost**

River Oaks Hospital projects the following expenses, revenues, and utilization for the first three years of operation for the proposed project:

<b>Expenses</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Salaries & Wages	\$ 298,537	\$ 313,464	\$ 329,137
Taxes and Benefits	\$ 74,634	\$ 78,366	\$ 82,284
Supplies, Drugs, & Blood	\$ 945,888	\$ 1,144,308	\$ 1,384,851
Utilities	\$ 9,000	\$ 9,900	\$ 10,890
Repair and Maint.	\$ 104,500	\$ 114,950	\$ 126,445
Insurance	\$ 11,660	\$ 12,826	\$ 14,109
Depreciation	\$ 369,088	\$ 369,088	\$ 369,088
Interest	\$ 213,112	\$ 171,004	\$ 126,299
Bad Debts	\$ 482,101	\$ 711,167	\$ 769,109
<b>Total Expenses</b>	<b>\$ <u>2,508,520</u></b>	<b>\$ <u>2,925,073</u></b>	<b>\$ <u>3,212,212</u></b>
<u>Revenue</u>			
Gross Pt. Revenue	\$ 13,162,509	\$ 15,803,700	\$ 17,091,305
Deductions	\$ (8,029,130)	\$ (9,798,294)	\$ (10,425,696)
Net Patient Revenue	\$ 5,133,379	\$ 6,005,406	\$ 6,665,609
<b>Net Income</b>	<b>\$ <u>2,624,859</u></b>	<b>\$ <u>3,080,333</u></b>	<b>\$ <u>3,453,397</u></b>
<u>Utilization</u>			
Surgeries	962	1,058	1,164
Cost Per Surgery	\$ 2,608	\$ 2,765	\$ 2,760
Charge Per Surgery	\$ 13,682	\$ 14,937	\$ 14,683

**C. Cost to Medicaid/Medicare**

<b>Patient Mix by Type Payer</b>	<b>Utilization Percentage</b>	<b>First Year Expenses</b>
<b>Medicaid</b>	12	\$ 301,022
<b>Medicare</b>	30	\$ 752,556
<b>Other</b>	<u>58</u>	<u>\$1,454,942</u>
<b>TOTAL</b>	<b><u>100</u></b>	<b><u>\$2,508,520</u></b>

River Oaks Hospital projects 2.0 percent of gross revenue for medically indigent patients, and 1.8 percent for bad debt patients.

**V. RECOMMENDATIONS OF OTHER AFFECTED AGENCIES**

The Division of Medicaid was provided a copy of this application for review and comment. According to the Division of Medicaid, outpatient services are paid as outlined in the **State Medicaid Plan**. The Division of Medicaid took no position on the proposed project.

**VI. CONCLUSION AND RECOMMENDATION**

This project is in substantial compliance with the criteria and standards for the construction, renovation, expansion, capital improvements, replacement, and addition of hospital beds as contained in the **FY 2006 State Health Plan**; the **Mississippi Certificate of Need Review Manual, Revised 2000**; and duly adopted rules, procedures, and plans of the Mississippi Department of Health.

The Division of Health Planning and Resource Development recommends approval of this application submitted by River Oaks Hospital, Inc. d/b/a River Oaks Hospital Systems River Oaks Hospital for renovation and expansion of its surgical suite, addition of ten post anesthesia recovery unit beds, and renovation of support spaces.

**River Oaks Hospital  
HG-R-1205-050**

**Attachment 1**

**Computation of Renovation Cost**

Renovation: 6,075 Square feet

\*Renovation Cost Formula

A.	Renovation	\$1,833,147	
E.	Fees	<u>217,604</u>	
	<b>Total</b>	<b>\$2,050,751</b>	<b>÷ 6,075 = \$337.57/sq. ft.</b>

\*Source: FY 2006 State Health Plan