

October 25, 1990
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Introduced by: Audrey Gruger

Proposed No.: 90-892

9683

ORDINANCE NO.

AN ORDINANCE making the following appropriations: \$1,367,300 to Harborview Repair and Replacement, Fund 3961; and \$15,100 to Harborview Long Range Capital Improvement Projects, Fund 3122, and amending Ordinance No. 9221, Section 92, attachments No. 1 and 2, as amended.

BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

SECTION 1. There is hereby approved and adopted an appropriation of \$83,000 to CIP Project No. 678288, HMC Radiology Lab Remodel; \$442,800 to Project No. 678292, Orthopedic Radiology Upgrade; \$780,500 to Project No. 678287, Operating Room Improvements; \$61,000 to Project No. 678295, North Wing HVAC Upgrade, from the operating reserves of Harborview Medical Center Repair and Replacement Fund 3961;

SECTION 2. There is hereby approved and adopted an appropriation of \$15,100 to Project No. 678297 - Harborview Bond Administration 1990, Fund 3122. The revenue to support this project will be derived from the budget allocated in the project administration portion (task code 009) of the CIP projects that were previously appropriated in 1990.

SECTION 3. Ordinance No. 9221, Section 92, Attachments 1 and 2, as amended, are hereby amended by adding thereto and inserting therein the following:

CIP PROJECT APPROPRIATIONS - From the several capital improvement project funds there are hereby appropriated and authorized to be disbursed the following amounts for specific projects identified in Attachment No. 1, as adjusted by Attachment No. 2 of this ordinance

<u>Fund</u>	<u>Capital Fund</u>	
3961	Harborview Repair and Replacement	\$ 1,367,300
3122	Harborview Long Range Capital Improvement Projects	\$ 15,100

1 The maximum number of additional FTEs to be budgeted in
2 Project No. 678297 shall be: .25

3 Provided that:

4 Harborview develop a six-year capital improvement plan as
5 required by the King County Charter Section 430.

6 INTRODUCED AND READ for the first time this 22nd day
7 of October, 1990.

8 PASSED this 29th day of October, 1990

9 KING COUNTY COUNCIL
10 KING COUNTY, WASHINGTON

11 Lois North
12 Chair

13 ATTEST:

14 Gerald A. Peterson
15 Clerk of the Council

16 APPROVED this 9th day of November, 1990

17 D. Hill
18 King County Executive

HARBORVIEW MEDICAL CENTER
Radiology Courtyard
Orthopedic Remodel
Operating Room Upgrades

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RADIOLOGY COURTYARD

The appropriation request for Radiology Courtyard reflects additional costs to the original budget as shown in the attached radiology lab spreadsheet. The administrative costs are projected through completion at a greater time commitment for construction administration than has previously been budgeted by the County. The hours reflect actual experience over the past four months.

The project has experienced a high degree of risk in the remodel portion as it relates to the operations of the hospital. The Project Manager has the responsibility for monitoring the contractor's activities on a daily basis within this environment to prevent accidents which pose a high probability of claims to the Owner. The project has experienced numerous and substantial contract safety violations by the contractor. Measures have been taken to put the contractor on notice as to his performance. The Project Office is of the opinion that retaining the contractor through completion of this project is in the best interest of the Owner. However, the contractor's retainage is contingent upon prudent and adequate project monitoring to ensure safe and timely completion of the project in this critical environment of medical care service delivery.

ORTHOPEDIC REMODEL AND OPERATING ROOM UPGRADES

The appropriation request for these two projects reflects an administrative budget commensurate with the time estimated for managing these projects in a 24-hour operational, hospital environment. The Orthopedic and Operating areas, as well as adjacent areas, will be in use by hospital staff and patients during the construction period. Due to the need for as much functionality as possible, the Operating Room project will be phased in small increments requiring a large number of hours in direct supervision and coordination.

In addition, the nature of the current public bid process is sometimes problematic because it can result in project award to contractors with varying levels of expertise in hospital construction/remodel projects. Owner administration time is very much a factor of contractor expertise. When a relatively inexperienced contractor is successful in receiving a hospital construction or remodel contract, it entails a relatively larger proportion of owner administrative time to ensure the proper coordination and implementation of the project.

The Operating Room project will require a series of small contracts in order to accomplish the various phases and different disciplines involved. This will result in additional owner administration time preparing the bid packages and processing them through the purchasing system. This budget considers all potential costs associated with project administration at Harborview Medical Center.

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RADIOLOGY LAB REMODEL
PROJECTED BALANCE TO END OF PROJECT
9-13-90

A. Project Balance as of March 1990		\$127,687.00
B. Encumbrances to Project April 1990 to Sept. 1990		
1. Cope Construction Change Order #1 (Bid Alts. 1 & 2)	(\$19,236.00)	
2. Administration expenses to end of project (May 1991)	(\$51,151.00)	
3. Radiology portion of Contract #C10239C, North Wing Chilled Water System Upgrade	(\$50,780.00)	
4. Misc. Printing Cost	(\$120.00)	
5. Inspection services required by Bldg. permit	(\$1,900.00)	
C. Project Balance as of Sept. 1990		\$4,500.00
D. Projected project cost to end of Project (May 1991)		
1. Floor mounted gas column @ Angio table	(\$2,500.00)	
2. Drain & Hose bibb for Fixer Recovery Unit	(\$1,500.00)	
3. Room Signs	(\$3,500.00)	
4. Emergency Power for Angio Fluoroscope	(\$11,000.00)	
5. Unencumbered change orders as of 8-27-90	(\$26,000.00)	
6. Design amendment for extra construction services	(\$2,000.00)	
7. Anticipated future change orders to end of project	(\$41,000.00)	
Total		(\$87,500.00)
E. Project Balance at end of Project (May 1991)		(\$83,000.00)

**RADIOLOGY COURTYARD PROJECT
FUNDING AMENDMENT**

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The Radiology Courtyard Project was originally designed to provide a second angiography suite, a second CT scanner and to provide more functional space for ultrasound. Additionally, support spaces would also be increased/renovated to accommodate the increased space requirements of the department. Final approval for the project was received on December 19, 1988 to proceed with design development. The project budget was \$1,657,797 and the notice to proceed was issued on March 15, 1990. A funding amendment is being requested to offset underallocation of contingency funds and additional charges incurred. The following is an analysis of expenditures.

<u>Contingency included in project budget</u>		<u>\$127,000</u>
	\$ 16,000	
1. Bid alternates accepted - darkroom and staff toilet (approved Facilities Committee 3/8/90)		
2. Prorated cost of HVAC in North Wing A/C project	\$ 50,000	
3. Additional project management costs due to change in King County Project charge back methodology length and complexity of project.	\$ 51,000	
		<u>\$ 117,000</u>
Contingency Balance		\$ 10,000
4. Change orders (structural and other) approved and pending approval	\$ 28,000 ¹	
5. Design contract amendment (HNTB)	\$ 2,000	
6. Specific change order requests	\$ 33,000 ²	
7. Future changes to be expected	\$ 30,000	<u>(\$ 93,000)</u>
		<u>(\$ 83,000)</u>

1. Structural steel at roof and first floor
 - Relocate fire sprinkler hangers
 - Remove existing steam, vent, water lines
 - Change existing non-rated to rated wall
 - Install lead shielded astragal to CT and angio doors
 - Revise roof flashing; add concrete base for circulating pump
 - Delete fencing (credit)
 - Existing windows to remain (credit)
 - Delete toilet accessories (credit)
 - Revise waste line at staff toilet and CT processor
 - Change processor waste line from copper to PVC
 - Modify curbs at ground where skylights were covered
 - Modify HVAC duct sizes to fit above ceiling
 - Revise ceiling and wall to enclose existing pipes
 - Supply anchor bolts for angio equipment bases
 - Extend new water line to fixture
 - Add 3" diameter exhaust ducts to film processors

2. Change angio gas column from ceiling to floor
 - Drain and hose bibb for silver recovery unit
 - Room signage
 - Emergency power for angio equipment
 - Additional computer cabling/electrical
 - HMC Engineering assistance

PROJECT NUMBER: 1280-233 (wk3) REV. DATE: 14 SEPT. 1990
 PROJECT NAME: 6 SOUTH RADIOLOGY (ORTHOPAEDIC) CLINIC RENOVATION ESTIMATE BY: ED LANGDON
 REQUESTING AGENCY: HARBORVIEW MEDICAL CENTER CHECKED BY: RICKY LANGFORD
 NOTE: FOLLOWING PROJECT COST ESTIMATE IS CONCEPTUAL - BASED UPON A FEASIBILITY
 STUDY (DRAFT) COMPLETED BY MAHLUM & NORDFORS, DATED 2/8/90.
 ASSUMES THAT CONSTRUCTION CONTRACT WILL BE BID THROUGH KING COUNTY.

ELEMENT	DESCRIPTION			
003	CONSTRUCTION			
	NET BUILDING COST		190400	
	GENERAL OVERHEAD	25.00%	47800	
	SUBTOTAL			238000
	SQUARE FEET	500		
	COST PER SQ FT	\$476.00		
	MAXIMUM ALLOWABLE CONSTRUCTION COST (MACC)			238000
	SALES TAX	8.10%	19278	
	CITY BUILDING PERMIT	2.33%	5545	
	DSHS PERMIT	1.60%	3570	
	ADVERTISING FOR BIDS		500	
	PRINT BID SETS		1200	
	OWNERS TESTS & INSPECTION:	1.95%	4638	
	HMC MAINTENANCE STAFF TIME	4.00%	9520	
	TELEPHONE/COMPUTER CABLING		1000	
	MOVING EXPENSES		2500	
	SUBTOTAL			47751
	TOTAL CONSTRUCTION ELEMENT 003			\$285,751
001	NON-COUNTY FORCE DESIGN			
	FEASIBILITY STUDIES		8000	
	A/E FEE 13.00% OF MACC		30940	
	PRINTING		1000	
	REIMBURSABLES		500	
	EXISTING CONDITION SURVEY & DOCUMENTATION		2500	
	ADVERTISEMENTS		500	
	DESIGN COMMISSION		2250	
	SURVEYS BY OWNER (X-RAY SHIELDING)		1000	
	RADIOLOGY EQUIP. COORDINATION		4500	
	SUBTOTAL			51190
	TOTAL DESIGN ELEMENT 001			\$51,190
007	COUNTY FORCE DESIGN			
	CHARGES		0	
	PRINTING		0	
	SPECIAL CONSULTANT SERVICES		0	
	SURVEYS		0	
	OTHER		0	
	SUBTOTAL			0
	TOTAL COUNTY DESIGN ELEMENT 007			\$0

PROJECT NUMBER: 260-239 (wk3) REV. DATE: 14 SEPT. 1990
 PROJECT NAME: OPERATING SUITE IMPROVEMENTS ESTIMATE BY: ED LANGDON
 REQUESTING AGENCY: HARBORVIEW MEDICAL CENTER CHECKED BY: RICKY LANGFORD
 NOTE: FOLLOWING PROJECT COST ESTIMATE IS CONCEPTUAL - AND
 ASSUMES THAT SEVERAL CONSTRUCTION/INSTALLATION CONTRACTS WILL
 BE LET THROUGH KING COUNTY.

ELEMENT	DESCRIPTION			
003	CONSTRUCTION			
	NET BUILDING COST		295200	
	GENERAL OVERHEAD	25.00%	73800	
	SUBTOTAL			369000
	SQUARE FEET			
	COST PER SQ FT			
	MAXIMUM ALLOWABLE CONSTRUCTION COST (MACC)			369000
	SALES TAX	8.10%	29889	
	CITY BUILDING PERMIT	2.33%	8598	
	DSHS PERMIT	1.50%	5535	
	ADVERTISING FOR BIDS		500	
	PRINT BID SETS		1200	
	OWNERS TESTS & INSPECTIONS	1.87%	6890	
	HMC MAINTENANCE STAFF TIME	4.00%	14780	0
	TELEPHONE/COMPUTER CABLING		0	
	MOVING EXPENSES		0	
	SUBTOTAL			67372
	TOTAL CONSTRUCTION ELEMENT 003			\$436,372
001	NON-COUNTY FORCE DESIGN			
	FEASIBILITY STUDIES		0	
	A/E FEE	12.70% OF MACC	46863	
	PRINTING		1000	
	REIMBURSABLES		500	
	EXISTING CONDITION SURVEY & DOCUMENTATION		4000	
	ADVERTISEMENTS		500	
	DESIGN COMMISSION		2250	
	SURVEYS BY OWNER (SLAB CORE SAMPLES)		2500	
	SURGERY EQUIP. COORDINATION		4500	
	SUBTOTAL			62113
	TOTAL DESIGN ELEMENT 001			\$62,113
007	COUNTY FORCE DESIGN			
	CHARGES		0	
	PRINTING		0	
	SPECIAL CONSULTANT SERVICES		0	
	SURVEYS		0	
	OTHER		0	
	SUBTOTAL			0
	TOTAL COUNTY DESIGN ELEMENT 007			\$0

OPERATING SUITE IMPROVEMENTS

<u>Item</u>	<u>Original Cost</u>	<u>Projected Cost</u>	<u>Discussion</u>
Construction	\$322,448	\$418,577	Added inflation (4%) Added impact of phasing construction (25%) Sales tax, etc. increase
Design	\$ 47,702	\$ 60,363	A/E fee increase (% of MACC) Increased misc. printing, survey costs
Equipment	\$ 84,118	\$104,452	Added inflation for prolonged schedule (10%)
Project Admin.	\$ 22,710	\$ 59,040	King County Project Administration doubled (12%) HMC maintenance support doubled (4%)
Contingency	\$ 48,091	\$128,086	Doubled contingency allowance (20%)
Art	\$ 3,932	\$ 6,183	Percent of MACC
Miscellaneous	---	\$ 5,800	Increased King County Design Commission fee Increased city building permit fee
TOTAL	\$529,000	\$780,500	+ \$251,500

ORTHOPEDIC CLINIC - RADIOLOGY RENOVATION

ITEM	ORIGINAL COST	PROJECTED COST	DISCUSSION
Construction	\$ 208,361	\$ 270,803	Added Inflation (4%) Added Impact of Phasing Construction (25%) Sales Tax, etc. increase
Design	\$ 40,308	\$ 49,440	A/E Fee Increase (% of MACC) Increase Printing Costs
Project Admin.	\$ 14,620	\$ 38,080	King County Project Administration doubled (12%) HMC Maintenance Support doubled (4%)
Contingency	\$ 26,600	\$ 71,665	Doubled Contingency Allowance (20%)
Art	\$ 2,712	\$ 4,113	Percent of MACC
Miscellaneous	---	\$ 8,700	Increased King County Design Commission Fee Increased City Building Permit Fee
TOTAL:	\$ 292,600	\$ 442,800	+ \$150,200

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SOURCES OF FUNDING

<u>Project</u>	<u>Reserve From Prior Year Projects</u>	<u>Building Repair & Replacement Fund</u>	<u>1991-92 Capital Renovation Fund</u>	<u>Computer Cabling</u>
Radiology Courtyard (\$83,000)	\$ 78,500			\$ 4,500
North Wing Air Conditioning (\$61,000)	\$ 61,000			
Ortho. Clinic Radiology Renovation (\$150,200)	\$150,200			
Operating Suite Improvements \$251,500)	\$ 60,300	\$ 65,450	\$125,750	
TOTAL	\$350,000	\$ 65,450	\$125,750	\$ 4,500
			GRAND TOTAL	\$545,700

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Attachment 3: North Wing Chiller
09-30-90

NORTH WING AIR CONDITIONING

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BID MACC	\$500,000
LOW BID	<u>\$492,000</u>
	\$ 8,000

ADDITIONS TO PROJECT

1) Replace thermostats ¹	\$24,000	
2) Diagnostic Display Panel ¹	\$17,000	
3) Contingency @ 10% ²	\$20,000	
4) HMC Maintenance ³	<u>\$ 8,000</u>	<u>(\$69,000)</u>
Additional Funding Required		\$61,000

FOOTNOTES

1. To replace existing thermostats with patient adjustable thermostats; to provide diagnostic display panel inside the building.
2. To provide contingency fund for project equal to 10% of MACC.
3. To provide HMC Main tenance staff time to assist with shutdowns, etc.

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NORTH WING AIR CONDITIONING

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BID MACC	\$500,000
LOW BID	<u>\$492,000</u>
	\$ 8,000

ADDITIONS TO PROJECT

1) Replace thermostats 1	\$24,000	
2) Diagnostic Display Panel 1	\$17,000	
3) Contingency @ 10% 2	\$20,000	
4) HMC Maintenance 3	<u>\$ 8,000</u>	<u>(\$69,000)</u>
Additional Funding Required		\$61,000

FOOTNOTES

1. To replace existing thermostats with patient adjustable thermostats; to provide diagnostic display panel inside the building.
2. To provide contingency fund for project equal to 10% of MACC.
3. To provide HMC Main tenance staff time to assist with shutdowns, etc.

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