

**Middlesex County  
Capital Facilities Condition  
Inspection and Projection  
Report**

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**Summary Report**

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**DiNisco Kretsch and Associates  
Architects and Planners  
Boston, Massachusetts**

**March 1983  
Volume III**

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## PROJECT TEAM

Under the personal direction of Kenneth F. DiNisco, DiNisco Kretsch and Associates, in conjunction with their engineering consultants, undertook the task of assembling information and transforming it within thirty days into a comprehensive and usable report. Without the expertise and exceptional cooperation of each team member, this demanding task could not have been accomplished. Accordingly, special recognition is due the following team members:

James Monteverde - DiNisco Kretsch and Associates, Inc.  
Architecture

James McWalter - Robert W. Sullivan, Inc.  
Plumbing

Frederick Vegkley - McCarron, Hufnagle, Vegkley and Bent  
Alfred Simonelli HVAC

James Henderson - Lottero and Mason Associates, Inc.  
Electrical

In addition to staff involvement, work for each engineering discipline was conducted under the personal direction of Eugene Sullivan, Frederick Vegkley, and Alfred Lottero.

DiNisco Kretsch and Associates took responsibility for editing all material and producing the final three volume report.

## ACKNOWLEDGEMENTS

We are indebted to the many people who helped in the fact gathering part of this study; clearly there are too many to name them all. Our work process is a participatory one which directly involves knowledgeable and helpful people from each facility. In each case, staff of the County Commissioners' office, the judiciary and clerks, directors of the Jail and House of Corrections, Hospital, Extension Service, Multi-Service Center, Registrar's of Deeds and Probate and maintenance personnel all contributed to our success.

Particular note must be taken of the invaluable assistance provided by the following people, who provided first-hand experience of each facility.

New Superior Courthouse	- Armando DeFilippis
Cambridge Old District Court	- Michael Savas
Cambridge Old Superior Court	- Frank Fitzpatrick
Registry of Deeds/Probate, Cambridge	- Joseph Macaluso
Jail/House of Corrections	- Louis Vlahakis
Multi-Service Center	- Edward Fallon
Extension Service	- Ronald Athanas
Hospital	- Anthony Zarella Richard Hebert

We must also acknowledge that this report was prepared under the personal direction of William Gustus of the County Commissioners' office. Together with Michael Savas, his liaison, and Sal Fuchino, who provided us with technical and engineering information, all available resources were made available to the project team on short notice.

We also note the interest and assistance of the County Advisory Board through the capable person of Sherry Martin, the Chairman of the Capital Expenditures Committee who was very helpful in establishing a usable and meaningful format for reporting summary information.

## INTRODUCTION

### Format

This report is presented in 3 volumes. Volume I includes detailed evaluations and costs for twelve courthouses, the unoccupied Old District and Old Superior Courts in Cambridge, the Registry of Deeds/Probate, and the Jail/House of Corrections. Volume II includes detailed evaluations and costs for the Multi-Service Center in Chelmsford, the Extension Service in Concord and the Hospital in Waltham.

Volume III is a Summary Report that organizes the recommended scope of work in a summary format according to priority and category of work.

### Purpose of the Study

This project has a broad and comprehensive purpose regarding all county owned facilities. As summarized in the request for proposals, this purpose is

"...to have available a complete picture as to the condition of and a projection as to when each applicable facet of each facility will have to be repaired or replaced and the estimated cost of repair or replacement of each item that calls for such action within five years of the study. The study shall be prepared and presented in final form which will allow easy up-dating of the information each year thereafter."

### Scope of the Study

This study encompasses all facilities owned by the County including Court Houses, Registry of Deeds/Probate, House of Corrections, Multi-Service Center and Extension Service Center, and Hospital. The base list of facilities was supplied by the County and consisted of 51 buildings. Other buildings were added during the course of the study for a total number of 56.

### Limitations

The survey was conducted in February 1983 and specific dates for the inspection of each facility are included on the evaluation sheet. The results are accurate as of that time. In response to a pressing need for a five year capital program, this study was produced within thirty days. Despite this very short time period, we believe the information to be accurate based upon our visual inspections, study of maintenance records, review of drawings and interviews with maintenance personnel.

It must be emphasized that this study does not include issues related to functional design deficiencies. Issues such as poor spatial relationships, inefficient circulation, offices that are too large or too small, are beyond the scope of this report. Similarly, the adequacy or condition of furnishings or movable equipment is also not considered.

## WORK METHOD

This study was conducted by architects, and plumbing, HVAC and electrical engineers who conducted an inspection of each facility as a team. Typically, the inspection began with a briefing and description of the facility by staff and/or maintenance personnel. Major or serious building problems were identified for careful study during the inspection. Whenever available, drawings, maintenance records, and service contract reports were reviewed. Following visual inspection, team members and maintenance personnel assembled together for a final briefing and discussion of building deficiencies and a ranking of priorities.

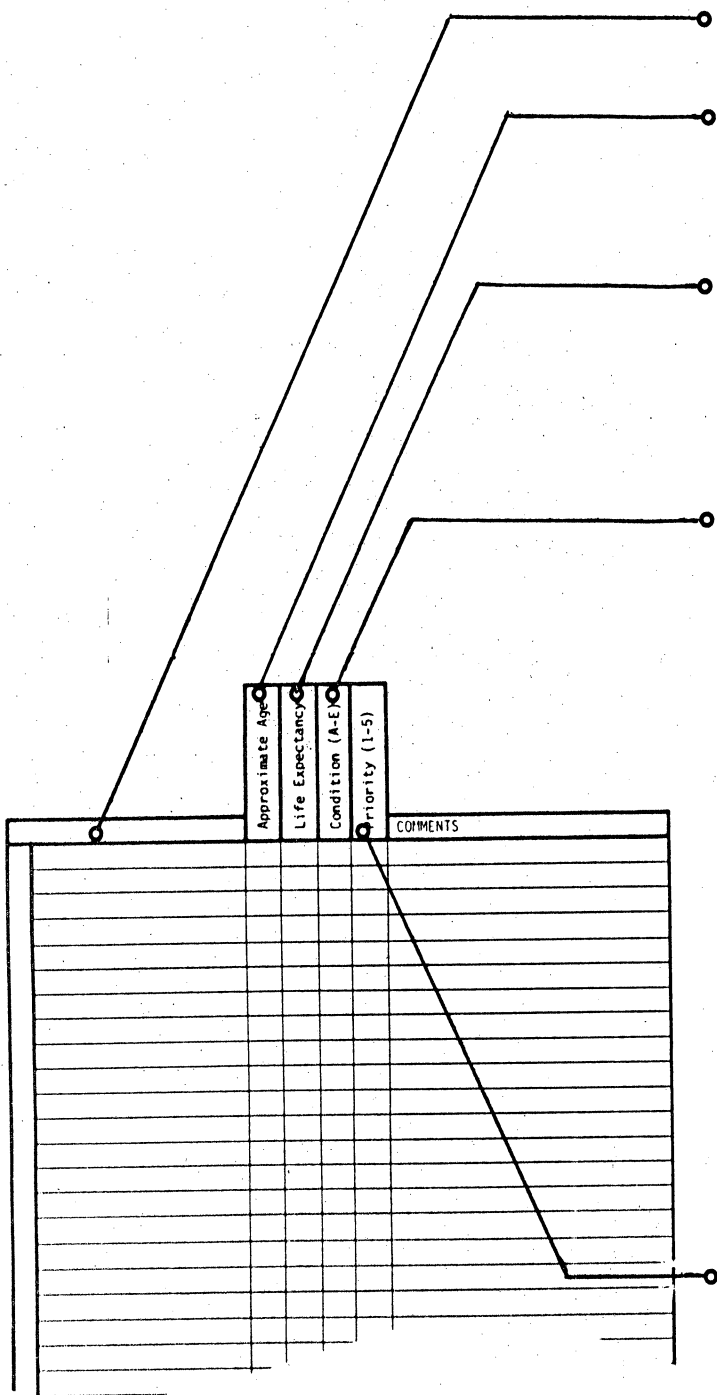
In addition to maintenance personnel at each facility, other resource people such as on-site supervisors for the elevator and HVAC service contracts were contacted, and the history and needs of each system were discussed.

For some of the larger facilities, current technical/energy audits were available. This information was invaluable in the confirmation of our own findings and provided supplementary data that would not otherwise be available within the scope and time limitations of this study.

A study of court facilities authorized by the Mass. State Trial Courts in 1980 provided excellent historical information and a general overview of the condition of all court facilities within the County. High quality studies such as this serve a multitude of purposes not the least of which is a uniform base of standards for subsequent studies. All too often studies are considered as independent and unrelated sources of information that in short order gather dust, if in fact, they can be found at all. The study by the Mass. State Trial Courts is an excellent reference and information base that should be used over and over again by the State, County, Judiciary and their consultants.

EVALUATION GUIDELINES

Explanation of EVALUATION FORM



Description of system.  
Architectural, Plumbing, HVAC or Electrical

Approximate Age of that system component in number of years. If a system is replaced or substantially improved, the age of the system is measured by that date.

Life Expectancy of that system in terms of useful life without major improvement or repair, i.e.,  
 sound structure = 50 years  
 new roof = 20 years  
 HVAC burner new = 20 years

Condition

A = Adequate. System is sound and functioning. No repair or remedial work is required.

B = Minor Repair. Requires repairs valued at less than 25% of the cost of a new system.

C = Major Repair. Requires repairs valued at less than 50% of the cost of a new system.

D = Replace. System is not functioning or requires excessive maintenance. Requires repairs valued at more than 50% of the cost of a new system.

E = Provide. A system or system component which is required by Building Code, Life Safety, Architectural Barriers, Energy Conservation, Security, etc.

Priority

- A blank means that no work is required.

A priority number of 1 through 5 means that work is required.

1 Is the highest priority and coincides with work scheduled in FY 1 (fiscal year).

5 Is the lowest priority and coincides with work scheduled in FY 5.

Explanation of STANDARDS used in EVALUATION FORM

<u>Category</u>	<u>Standard of Measure</u>
1. Maintenance	1. Consequential damage Deterioration of system
2. Energy Conservation	2. Simple payback
3. Architectural Barriers	3. Architectural Barriers Code <sup>(1)</sup>
4. Life Safety	4. Life Safety Codes <sup>(2)</sup> Standards of accepted practice
5. Security	5. Detention Standards <sup>(3)</sup> Intrusion Prevention <sup>(4)</sup> Documents Protection <sup>(4)</sup>

Reference Standards

- (1) Rules and Regulations of the Architectural Barriers Board, M.G.L. Ch. 22, Sec. 13A, 5/1/82.
- (2) a. Commonwealth of Massachusetts State Building Code, 6/1/79.  
b. Electrical Standards NFPA-70-1981.  
c. HVAC Standards ASHRAE-1983.
- (3) a. General Rules for Police Station Houses, Lock-ups, Houses of Detention, Jails, Houses of Correction, Prisons, and Reformatories, M.G.L. Ch. 111, Sec. 21.  
b. Standards for Police Detention of Juveniles, 2/1/57 and 2/1/67.
- (4) Specifications for Safes and Vaults for the Safeguarding of Public Records, M.G.L. Ch. 66, Sec. 11.

## PRIORITY Evaluations

The selection of a priority (1 to 5) for each system component is based upon a VALUE JUDGMENT which considers the age, condition, and seriousness of deficiency (life safety, consequential damage, etc.).

In order to establish a consistent standard of measure throughout the report, basic priorities were established for each category of work. Only in extreme or unusual conditions did the priorities vary from the listing below.

### PRIORITY STANDARDS

Priority 1 - LIFE SAFETY

Priority 2 - SECURITY

Priority 3 - MAINTENANCE

Priority 4 - ENERGY

Priority 5 - ARCHITECTURAL BARRIERS<sup>(1)</sup>

(1) The standards used in this report are based upon the March 1, 1982 Architectural Barriers Board Requirements which are directed to new or renovated buildings. Most of the buildings studied because of their age do not conform and have been given a priority 5 rating. It should be noted that these pre-existing non-conforming buildings are not required to conform unless substantial renovation and/or additions are involved. We have identified the need to remove architectural barriers because public buildings are involved. Clearly the decision is a discretionary one by the County.

## COST ESTIMATE GUIDELINES

### Assumptions

The basic premise of this study is that each facility, in the absence of any directives to the contrary, will continue to function according to its existing use for the foreseeable future. The only exceptions to this rule are the Old District and Old Superior Courts in Cambridge which have been abandoned since 1974. In this instance, we have estimated the cost to restore these two buildings to a full and useful function as office or court buildings. The cost to fully restore these buildings will assist the County in determining their present value, even though specific re-use plans are proposed for the Old Superior Court.

### Cost Factors

All costs for system components included on the cost sheet and 5 Year Development Plan - Summary are raw construction costs based upon a FY 1983-84 construction period. The costs come from Means Building Cost Indexes (1982 Edition) and cost data compiled by the project team on previous projects.

An adjusted cost factor which considers escalation at an annual rate of 10%/year is applied to years 2, 3, 4, and 5 on the Long Range Capital Facilities Development Plan only.

On complex renovation work, an additional 25% is added to the raw construction cost to cover the costs of recommended Architectural/Engineering fees (10%) and a construction contingency (15%). These additional cost factors are evident on the Long Range Capital Facilities Development Plan only.

MIDDLESEX COUNTY CAPITAL FACILITIES CONDITION INSPECTION AND PROJECTION REPORT

5 YEAR DEVELOPMENT PLAN - SUMMARY

		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
AYER	LIFE SAFETY	18,975	-	-	-	-
	SECURITY	-	41,709	19,410	10,267	-
	MAINTENANCE	22,400	-	-	-	19,001
	ENERGY	-	-	300	-	1,130
	ARCH. BARRIERS	8,500	-	-	-	32,880
	TOTAL	49,875	41,709	19,710	10,267	53,011
CAMBRIDGE SUP.	LIFE SAFETY	542,480	-	-	-	16,000
	SECURITY	-	100,558	-	-	-
	MAINTENANCE	200,000	200,000	174,735	10,320	57,160
	ENERGY	-	-	243,000	-	10,350
	ARCH. BARRIERS	-	-	-	-	31,000
	TOTAL	742,480	300,558	417,735	10,320	93,510
CONCORD	LIFE SAFETY	68,372	-	-	-	-
	SECURITY	-	37,825	-	-	-
	MAINTENANCE	51,400	81,900	27,278	4,460	6,200
	ENERGY	-	-	-	-	800
	ARCH. BARRIERS	-	-	-	-	6,800
	TOTAL	119,772	119,725	27,278	4,460	13,800
FRAMINGHAM	LIFE SAFETY	55,753	-	-	-	-
	SECURITY	-	62,761	-	-	-
	MAINTENANCE	10,700	2,000	75,818	950	21,593
	ENERGY	-	-	6,900	-	740
	ARCH. BARRIERS	-	-	-	11,492	7,475
	TOTAL	65,753	64,761	82,718	12,442	29,808
LOWELL DISTRICT	LIFE SAFETY	144,000	-	-	-	-
	SECURITY	12,000	58,200	-	-	-
	MAINTENANCE	24,480	-	208,400	3,500	30,700
	ENERGY	-	5,000	12,000	-	800
	ARCH. BARRIERS	-	-	-	-	27,800
	TOTAL	180,480	63,200	220,400	3,500	59,300

NOTE: The costs on the 5 Year Development Plan - Summary are CONSTRUCTION COSTS ONLY.

MIDDLESEX COUNTY CAPITAL FACILITIES CONDITION INSPECTION AND PROJECTION REPORT

5 YEAR DEVELOPMENT PLAN - SUMMARY

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		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
LOWELL SUPERIOR	LIFE SAFETY	201,218	-	-	-	-
	SECURITY	20,000	59,314	-	-	-
	MAINTENANCE	28,500	2,800	302,598	2,000	58,250
	ENERGY	-	-	18,050	-	600
	ARCH. BARRIERS	-	-	-	-	12,750
	TOTAL	249,718	62,114	320,648	2,000	71,600
MALDEN	LIFE SAFETY	34,736	-	-	-	-
	SECURITY	12,000	70,083	-	-	-
	MAINTENANCE	2,000	-	35,770	-	17,300
	ENERGY	1,500	-	12,200	-	950
	ARCH. BARRIERS	-	-	-	9,934	32,125
	TOTAL	50,236	70,083	47,970	9,934	50,375
MARLBORO	LIFE SAFETY	25,052	1,200	-	-	-
	SECURITY	-	57,891	16,663	-	2,000
	MAINTENANCE	7,500	38,000	12,200	-	5,500
	ENERGY	-	-	-	-	1,250
	ARCH. BARRIERS	-	-	-	-	23,807
	TOTAL	32,552	97,091	28,863	-	32,557
NEWTON	LIFE SAFETY	35,993	-	-	-	-
	SECURITY	8,000	39,274	-	-	-
	MAINTENANCE	-	300	85,831	750	5,250
	ENERGY	2,000	-	-	-	100
	ARCH. BARRIERS	-	-	-	-	12,679
	TOTAL	45,993	39,574	85,831	750	18,029
SOMERVILLE	LIFE SAFETY	20,635	-	-	-	-
	SECURITY	10,000	71,716	-	-	-
	MAINTENANCE	9,660	-	14,792	-	11,140
	ENERGY	-	-	5,730	-	1,050
	ARCH. BARRIERS	-	-	-	-	12,080
	TOTAL	40,295	71,716	20,522	-	24,270

MIDDLESEX COUNTY CAPITAL FACILITIES CONDITION INSPECTION AND PROJECTION REPORT

5 YEAR DEVELOPMENT PLAN - SUMMARY

3 of 8

		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
WALTHAM	LIFE SAFETY	45,962	-	-	-	-
	SECURITY	8,000	58,265	-	-	-
	MAINTENANCE	15,100	3,360	153,014	-	5,250
	ENERGY	-	-	5,000	-	1,460
	ARCH. BARRIERS	-	-	-	-	27,550
	TOTAL	69,062	61,625	158,014	-	34,260
WOBURN	LIFE SAFETY	20,929	-	-	3,963	-
	SECURITY	-	48,507	-	-	-
	MAINTENANCE	1,600	-	16,388	-	38,180
	ENERGY	-	6,500	15,400	-	1,900
	ARCH. BARRIERS	-	-	-	-	23,836
	TOTAL	22,529	55,007	31,788	3,963	62,016
CAMBRIDGE OLD DISTRICT	LIFE SAFETY	-	-	-	-	-
	SECURITY	-	-	-	-	-
	MAINTENANCE	2,260	-	-	-	-
	ENERGY	-	-	-	-	-
	ARCH. BARRIERS	-	-	-	-	-
	TOTAL	2,260	-	-	-	-
CAMBRIDGE OLD SUPERIOR	LIFE SAFETY	-	-	-	-	-
	SECURITY	-	-	-	-	-
	MAINTENANCE	2,260	-	-	-	-
	ENERGY	-	-	-	-	-
	ARCH. BARRIERS	-	-	-	-	-
	TOTAL	2,260	-	-	-	-
REGISTRY OF DEEDS /PROBATE	LIFE SAFETY	223,795	-	-	-	-
	SECURITY	-	132,660	-	-	-
	MAINTENANCE	401,400	520,000	27,025	-	250
	ENERGY	-	-	51,925	-	-
	ARCH. BARRIERS	-	-	-	-	38,530
	TOTAL	625,195	652,660	78,950	-	38,780

MIDDLESEX COUNTY CAPITAL FACILITIES CONDITION INSPECTION AND PROJECTION REPORT

5 YEAR DEVELOPMENT PLAN - SUMMARY

4 of 8

HOUSE OF CORRECTIONS		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
MAIN BUILDING	LIFE SAFETY	252,600	-	-	-	-
	SECURITY	-	-	-	-	-
	MAINTENANCE	175,000	390,704	302,500	141,780	470,631
	ENERGY	-	-	-	-	29,100
	ARCH. BARRIERS	-	-	-	-	25,200
	TOTAL	427,600	390,704	302,500	141,780	524,931
DORMITORY	LIFE SAFETY	12,225	11,245	-	-	-
	SECURITY	-	-	-	-	-
	MAINTENANCE	-	-	14,670	19,318	15,882
	ENERGY	-	-	9,900	-	7,700
	ARCH. BARRIERS	-	-	-	-	-
	TOTAL	12,225	11,245	24,570	19,318	23,582
WORK RELEASE 1,2	LIFE SAFETY	15,231	-	8,000	-	-
	SECURITY	-	-	-	-	-
	MAINTENANCE	-	2,512	-	-	7,000
	ENERGY	-	-	-	-	8,200
	ARCH. BARRIERS	-	-	-	-	-
	TOTAL	15,231	2,512	8,000	-	15,200
MISC. BUILDINGS	LIFE SAFETY	-	-	-	-	-
	SECURITY	-	-	-	-	-
	MAINTENANCE	-	-	-	-	13,000
	ENERGY	-	-	-	-	500
	ARCH. BARRIERS	-	-	-	-	-
	TOTAL	-	-	-	-	13,500
	LIFE SAFETY					
	SECURITY					
	MAINTENANCE					
	ENERGY					
	ARCH. BARRIERS					
	TOTAL					

MIDDLESEX COUNTY CAPITAL FACILITIES CONDITION INSPECTION AND PROJECTION REPORT

5 YEAR DEVELOPMENT PLAN - SUMMARY

MULTI-SERVICE CENTER  
CHELMSFORD

		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
UPHAM BUILDING	LIFE SAFETY	5,200	-	-	-	-
	SECURITY	-	-	-	-	-
	MAINTENANCE	300	-	-	-	490
	ENERGY	-	-	3,800	-	900
	ARCH. BARRIERS	-	-	-	-	-
	TOTAL	5,500	-	3,800	-	1,390
RESIDENCE	LIFE SAFETY	13,500	-	-	-	-
	SECURITY	-	-	-	-	-
	MAINTENANCE	-	-	-	4,500	-
	ENERGY	-	-	-	-	200
	ARCH. BARRIERS	-	-	-	-	-
	TOTAL	13,500	-	-	4,500	200
REED BUILDING	LIFE SAFETY	13,120	-	-	-	-
	SECURITY	-	5,760	-	-	-
	MAINTENANCE	-	-	23,400	12,960	16,320
	ENERGY	-	-	3,350	-	200
	ARCH. BARRIERS	-	-	-	-	-
	TOTAL	13,120	5,760	26,750	12,960	16,520
BIGELOW BUILDING	LIFE SAFETY	5,200	-	-	-	-
	SECURITY	-	-	-	-	-
	MAINTENANCE	3,800	-	-	-	-
	ENERGY	-	-	-	-	400
	ARCH. BARRIERS	-	-	-	-	-
	TOTAL	9,000	-	-	-	400
GOULD BUILDING	LIFE SAFETY	7,630	-	-	-	-
	SECURITY	-	2,880	-	-	-
	MAINTENANCE	2,448	900	6,120	-	3,600
	ENERGY	-	-	250	-	-
	ARCH. BARRIERS	-	-	-	-	2,040
	TOTAL	10,078	3,780	6,370	-	5,640

MIDDLESEX COUNTY CAPITAL FACILITIES CONDITION INSPECTION AND PROJECTION REPORT

5 YEAR DEVELOPMENT PLAN - SUMMARY

MULTI-SERVICE CENTER  
CHELMSFORD

		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
RICHARDSON BLDG.	LIFE SAFETY	5,200	-	-	-	-
	SECURITY	-	-	-	-	-
	MAINTENANCE	3,100	-	-	-	-
	ENERGY	-	-	-	-	950
	ARCH. BARRIERS	-	-	-	-	-
	TOTAL	8,300	-	-	-	950
MISC. BUILDINGS	LIFE SAFETY	-	-	-	-	-
	SECURITY	-	-	-	-	-
	MAINTENANCE	-	600	-	-	-
	ENERGY	-	-	-	-	-
	ARCH. BARRIERS	-	-	-	-	-
	TOTAL	-	600	-	-	-
	LIFE SAFETY					
	SECURITY					
	MAINTENANCE					
	ENERGY					
	ARCH. BARRIERS					
	TOTAL					
	LIFE SAFETY					
	SECURITY					
	MAINTENANCE					
	ENERGY					
	ARCH. BARRIERS					
	TOTAL					
	LIFE SAFETY					
	SECURITY					
	MAINTENANCE					
	ENERGY					
	ARCH. BARRIERS					
	TOTAL					

MIDDLESEX COUNTY CAPITAL FACILITIES CONDITION INSPECTION AND PROJECTION REPORT

5 YEAR DEVELOPMENT PLAN - SUMMARY

COUNTY EXTENSION SERV.  
CONCORD

		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
MAIN BUILDING	LIFE SAFETY	8,572	-	-	-	-
	SECURITY	-	1,080	-	-	-
	MAINTENANCE	-	1,065	7,473	14,550	1,420
	ENERGY	-	-	1,500	-	-
	ARCH. BARRIERS	-	-	-	-	9,000
	TOTAL	8,572	2,145	8,973	14,550	10,420
GARAGE	LIFE SAFETY	928	-	-	-	-
	SECURITY	-	384	-	-	-
	MAINTENANCE	-	-	960	3,608	278
	ENERGY	-	-	-	-	-
	ARCH. BARRIERS	-	-	-	-	-
	TOTAL	928	384	960	3,608	278
SCHOOL	LIFE SAFETY	1,524	-	-	-	-
	SECURITY	-	500	-	-	-
	MAINTENANCE	-	480	2,424	1,899	818
	ENERGY	-	-	900	-	-
	ARCH. BARRIERS	-	-	-	-	5,450
	TOTAL	1,524	980	3,324	1,899	6,268
	LIFE SAFETY					
	SECURITY					
	MAINTENANCE					
	ENERGY					
	ARCH. BARRIERS					
	TOTAL					
	LIFE SAFETY					
	SECURITY					
	MAINTENANCE					
	ENERGY					
	ARCH. BARRIERS					
	TOTAL					

5 YEAR DEVELOPMENT PLAN - SUMMARY

*hospital*

		YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
MAIN BUILDING	LIFE SAFETY	264,550	-	-	-	-
	SECURITY	-	59,368	-	-	-
	MAINTENANCE	215,000	52,120	610,579	162,000	9,930
	ENERGY	-	-	-	-	2,500
	ARCH. BARRIERS	-	-	-	6,060	84,630
	TOTAL	479,550	111,578	610,579	168,060	97,060
MISC. BUILDINGS	LIFE SAFETY	93,771	-	3,900	-	-
	SECURITY	-	15,040	-	-	-
	MAINTENANCE	130,600	46,712	130,380	5,250	26,150
	ENERGY	-	-	-	-	7,200
	ARCH. BARRIERS	-	-	-	9,834	-
	TOTAL	224,371	61,752	134,280	15,080	33,350
	LIFE SAFETY					
	SECURITY					
	MAINTENANCE					
	ENERGY					
	ARCH. BARRIERS					
	TOTAL					
	LIFE SAFETY					
	SECURITY					
	MAINTENANCE					
	ENERGY					
	ARCH. BARRIERS					
	TOTAL					
	LIFE SAFETY					
	SECURITY					
	MAINTENANCE					
	ENERGY					
	ARCH. BARRIERS					
	TOTAL					

*The Commonwealth of Massachusetts*  
**LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FOR YEARS 1983-84 to 1987-88**

FORM LRP-3  
 SHEET 1 OF 6

AGENCY/DEPARTMENT Middlesex County

SUBMITTED BY DiNisco Kretsch and Associates DATE 3/3/83

PRIORITY	PROJECT DESCRIPTION AND LOCATION	PROJECT SIZE	CAPACITY	MAINTENANCE & OPERATION COST	STAFFING NUMBER & COST	REVENUES AND/OR FEDERAL FUNDS	INDICATE PRIOR PHASE COMPLETED OR IN PROGRESS	PROPOSED PROGRAM: REQUEST PURPOSE AND AMOUNT					
								REQUEST PURPOSE KEY (INSERT KEY NUMBER IN YEAR BEING REQUESTED.)					
								(1) Program	(2) Study	(3) Land	(4) Plans	(5) Construction	(6) Total Project Request
I	II	III	IV	V	VI	VII	VIII	IX 1983-84	X 1984-85	XI 1985-86	XII 1986-87	XIII 1987-88	XIV TOTALS
1	Renov. for life safety (E) and maint. (H); Superior Court, Cambridge.							(4) 74,248	(5) 853,852				(6) 928,100
2	Renov. for life safety (A,P,H) and maintenance (A,E,H); Registry of Deeds/ Probate, Cambridge.							(4) 62,520	(5) 718,974				(6) 781,494
3	Renov. for life safety (A,P,E) and maintenance (H); main bldgs. County Hospital, Waltham.							(4) 47,955	(5) 551,483				(6) 599,438
4	Renov. for life safety (P,E) and maintenance (A,H); main bldg., House of Correction, Billerica.							(4) 42,760	(5) 491,740				(6) 534,500
5	Renov. for life safety (P,E); dormitory, House of Correction, Billerica.							(4) 1,223	(5) 14,058				(6) 15,281
6	Renov. for life safety (A,P,E,H), security (A), maint. (A); Superior Court, Lowell.							(4) 24,972	(5) 287,176				(6) 312,148
<b>TOTALS</b>													

A = Architectural  
 P = Plumbing

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 H = Heating, Ventilating & Air Conditioning

NOTE: The construction costs on the Long Range Capital Development Plan - Priorities include a 15% CONTINGENCY.

The Commonwealth of Massachusetts

FORM LRP-3  
SHEET 2 OF 16

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FOR YEARS 1983-84 to 1987-88

AGENCY/DEPARTMENT Middlesex County

SUBMITTED BY Dinisco Kretsch and Associates DATE 3/3/83

I PRIORITY	II PROJECT DESCRIPTION AND LOCATION	III PROJECT SIZE	IV CAPACITY	V MAINTENANCE & OPERATION COST	VI STAFFING NUMBER & COST	VII REVENUES AND/OR FEDERAL FUNDS	VIII INDICATE PRIOR PHASE COMPLETED OR IN PROGRESS	PROPOSED PROGRAM: REQUEST PURPOSE AND AMOUNT					
								REQUEST PURPOSE KEY (INSERT KEY NUMBER IN YEAR BEING REQUESTED.)					
								(1) Program	(2) Study	(3) Land	(4) Plans	(5) Construction	(6) Total Project Request
								IX 1983-84	X 1984-85	XI 1985-86	XII 1986-87	XIII 1987-88	XIV TOTALS
7	Renov. for life safety (A,P,E,H), security (A) and maint. (E); District Court, Lowell.							(4) 18,048	(5) 207,552				(6) 225,600
8	Renov. for life safety (P,E) and maint. (A); District Court, Concord.							(4) 11,977	(5) 137,738				(6) 149,715
9	Renov. for life safety (A,P,E,H), security (A) and energy (H); District Court, Newton.							(4) 4,599	(5) 52,892				(6) 57,491
10	Renov. for life safety (P,E) and maint. (H); District Court, Marlborough.							(4) 3,255	(5) 37,435				(6) 40,690
11	Renov. for life safety (A,P,E,H), security (A), maint. (H) and energy (H); District Court, Malden.							(4) 5,024	(5) 57,805				(6) 62,829
12	Renov. for life safety (A,P,E,H), security (A), maint. (A) and energy (H); District Court, Waltham.							(4) 6,906	(5) 79,422				(6) 86,328
	<b>TOTALS</b>												

A = Architectural      E = Electrical  
P = Plumbing            H = Heating, Ventilating & Air Conditioning

*The Commonwealth of Massachusetts*

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FOR YEARS 1983-84 to 1987-88

AGENCY/DEPARTMENT Middlesex County

SUBMITTED BY DiNisco Kretsch and Associates DATE 3/3/83

PRIORITY	PROJECT DESCRIPTION AND LOCATION	PROJECT SIZE	CAPACITY	MAINTENANCE & OPERATION COST	STAFFING NUMBER & COST	REVENUES AND OR FEDERAL FUNDS	INDICATE PRIOR PHASE COMPLETED OR IN PROGRESS	PROPOSED PROGRAM: REQUEST PURPOSE AND AMOUNT					
								REQUEST PURPOSE KEY (INSERT KEY NUMBER IN YEAR BEING REQUESTED.)					
								(1) Program	(2) Study	(3) Land	(4) Plans	(5) Construction	(6) Total Project Request
I	II	III	IV	V	VI	VII	VIII	IX 1983-84	X 1984-85	XI 1985-86	XII 1986-87	XIII 1987-88	XIV TOTALS
13	Renov. for life safety (P,E), maint. (A,P,H) and arch. barriers (P); District Court, Ayer.							(4) 4,988	(5) 58,356				(6) 63,344
14	Renov. for life safety (P,E,H), security (A) and maint. (A); District Court, Somerville.							(4) 4,029	(5) 46,340				(6) 50,369
15	Renov. for life safety (A,P,E,H), maint. (A,P); District Court, Framingham.							(4) 6,575	(5) 75,616				(6) 82,191
16	Renov. for life safety (P,E), security (E), maint. (A) and energy (H); District Court, Woburn.							(4) 2,253	(5) 25,908				(6) 28,161
17	Renov. for life safety (A,P,E) and maint. (P,E); All bldgs., Multi-Service Center, Chelmsford.							(4) 5,950	(5) 68,823				(6) 74,773
<b>TOTALS</b>													

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The Commonwealth of Massachusetts

FORM LRP-3  
SHEET 4 OF 16

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FOR YEARS 1983-84 to 1987-88

AGENCY/DEPARTMENT Middlesex County

SUBMITTED BY DiNisco Kretsch and Associates DATE 3/3/83

PRIORITY	PROJECT DESCRIPTION AND LOCATION	PROJECT SIZE	CAPACITY	MAINTENANCE & OPERATION COST	STAFFING NUMBER & COST	REVENUES AND OR FEDERAL FUNDS	INDICATE PRIOR PHASE COMPLETED OR IN PROGRESS	PROPOSED PROGRAM: REQUEST PURPOSE AND AMOUNT					
								REQUEST PURPOSE KEY (INSERT KEY NUMBER IN YEAR BEING REQUESTED.)					
								(1) Program	(2) Study	(3) Land	(4) Plans	(5) Construction	(6) Total Project Request
I	II	III	IV	V	VI	VII	VIII	IX 1983-84	X 1984-85	XI 1985-86	XII 1986-87	XIII 1987-88	XIV TOTALS
18	Renov. for life safety (P,E,H); work release bldgs., House of Correction, Billerica.							(4) 1,523	(5) 17,516				(6) 19,039
19	Renov. for life safety (A,P,E); all bldgs.; County Extension Service, Concord.							(4) 1,102	(5) 12,672				(6) 13,774
20	Renov. for maint. (A); Old District Court, Cambridge.							(5) 2,825					(6) 2,825
21	Renov. for maint. (A); Old Superior Court, Cambridge.							(5) 2,825					(6) 2,825
22	Renov. for life safety (E) and maint. (P); Misc. Bldgs., County Hospital, Waltham.							(4) 22,437	(5) 258,027				(6) 280,464
23	Renov. for life safety (E) and maint. (P,H); Registry of Deeds/ Probate, Cambridge.							(4) 65,266	(5) 750,559				(6) 815,825
<b>TOTALS</b>													

A = Architectural      E = Electrical  
P = Plumbing          H = Heating, Ventilating & Air Conditioning

The Commonwealth of Massachusetts

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SHEET 5 OF 16

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FOR YEARS 1983-84 to 1987-88

AGENCY/DEPARTMENT Middlesex County

SUBMITTED BY DiNisco Kretsch and Associates DATE 3/3/83

I PRIORITY	II PROJECT DESCRIPTION AND LOCATION	III PROJECT SIZE	IV CAPACITY	V MAINTENANCE & OPERATION COST	VI STAFFING NUMBER & COST	VII REVENUES AND OR FEDERAL FUNDS	VIII INDICATE PRIOR PHASE COMPLETED OR IN PROGRESS	PROPOSED PROGRAM: REQUEST PURPOSE AND AMOUNT					
								REQUEST PURPOSE KEY (INSERT KEY NUMBER IN YEAR BEING REQUESTED.)					
								(1) Program	(2) Study	(3) Land	(4) Plans	(5) Construction	(6) Total Project Request
								IX 1983-84	X 1984-85	XI 1985-86	XII 1986-87	XIII 1987-88	XIV TOTALS
24	Renov. for security (E) and maint. (E,H) Main Bldg., County Hospital, Waltham.							(4) 11,158	(5) 128,315				(6) 139,473
25	Renov. for security (E) and maint. (H); Superior Court, Cambridge.							(4) 37,569	(5) 338,129				(6) 375,698
26	Renov. for maintenance (A,P,E,); main bldg., House of Correction, Billerica							(4) 39,070	(5) 449,310				(6) 488,380
27	Renov. for security (E) and maint. (A); Superior Court, Lowell.							(4) 6,211	(5) 71,432				(6) 77,643
28	Renov. for security (E) and energy (H); District Court, Lowell.							(4) 6,320	(5) 72,680				(6) 79,000
29	Renov. for security (E) and maint. (A); District Court, Newton.							(4) 3,957	(5) 45,511				(6) 49,468
30	Renov. for security (E) and maint. (E); District Court, Malden.							(4) 7,008	(5) 80,596				(6) 87,604
<b>TOTALS</b>													

A = Architectural  
P = Plumbing

E = Electrical  
H = Heating, Ventilating & Air Conditioning

The Commonwealth of Massachusetts

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FOR YEARS 1983-84 to 1987-88

FORM LRP-3  
SHEET 6 OF 16

AGENCY DEPARTMENT Middlesex County

SUBMITTED BY DiNisco Kretsch and Associates DATE 3/3/83

PRIORITY	PROJECT DESCRIPTION AND LOCATION	PROJECT SIZE	CAPACITY	MAINTENANCE & OPERATION COST	STAFFING NUMBER & COST	REVENUES AND/OR FEDERAL FUNDS	INDICATE PRIOR PHASE COMPLETED OR IN PROGRESS	PROPOSED PROGRAM: REQUEST PURPOSE AND AMOUNT					
								REQUEST PURPOSE KEY (INSERT KEY NUMBER IN YEAR BEING REQUESTED.)					
I	II	III	IV	V	VI	VII	VIII	IX 1983-84	X 1984-85	XI 1985-86	XII 1986-87	XIII 1987-88	XIV TOTALS
31	Renov. for security (E) and maint. (A, P); District Court, Concord.							(4) 11,973	(5) 137,683				(6) 149,656
32	Renov. for life safety (H), security (A,E) and maint. (A,H); District Court, Marlborough.							(4) 9,709	(5) 111,655				(6) 121,364
33	Renov. for security (E) and maint. (A, E); District Court, Framingham.							(4) 6,476	(5) 74,475				(6) 80,951
34	Renov. for security (E) and maint. (A); District Court, Waltham.							(4) 6,163	(5) 70,868				(6) 77,031
35	Renov. for security (E); District Court, Somerville.							(4) 7,172	(5) 82,473				(6) 89,645
36	Renov. for security (E); District Court, Ayer.							(4) 4,131	(5) 48,005				(6) 52,136
37	Renov. for security (E) and energy (A); District Court, Woburn.							(4) 5,501	(5) 63,254				(6) 68,755
<b>TOTALS</b>													

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H = Heating, Ventilating & Air Conditioning

*The Commonwealth of Massachusetts*

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FOR YEARS 1983-84 to 1987-88

AGENCY/DEPARTMENT Middlesex County

SUBMITTED BY DiNisco Kretsch and Associates DATE 3/3/83

PRIORITY	PROJECT DESCRIPTION AND LOCATION	PROJECT SIZE	CAPACITY	MAINTENANCE & OPERATION COST	STAFFING NUMBER & COST	REVENUES AND OR FEDERAL FUNDS	INDICATE PRIOR PHASE COMPLETED OR IN PROGRESS	PROPOSED PROGRAM: REQUEST PURPOSE AND AMOUNT					
								REQUEST PURPOSE KEY (INSERT KEY NUMBER IN YEAR BEING REQUESTED.)					
I	II	III	IV	V	VI	VII	VIII	IX 1983-84	X 1984-85	XI 1985-86	XII 1986-87	XIII 1987-88	XIV TOTALS
38	Renov. for security (E), maint. (P); all bldgs., Multi-Service Center, Chelmsford.							(4) 1,014	(5) 11,661				(6) 12,675
39	Renov. for life safety (E); dormitory House of Correction, Billerica.							(4) 1,124	(5) 12,932				(6) 14,056
40	Renov. for maint. (E); work release bldg., House of Correction, Billerica.							(4) 314	(5) 2,826				(6) 3,140
41	Renov. for security (E) and maint. (P, E); Misc. bldgs., County Hospital, Waltham.							(4) 6,175	(5) 71,015				(6) 77,190
42	Renov. for security (E) and maint. (A); all bldgs., County Extension Serv., Concord.							(4) 351	(5) 4,035				
43	Renov. for maint. (A,E) and energy (A); Registry of Deeds/Probate, Cambridge.								(4) 7,895	(5) 90,793			(6) 98,688
<b>TOTALS</b>													

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The Commonwealth of Massachusetts

FORM LRP-3  
SHEET 8 OF 16

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FOR YEARS 1983-84 to 1987-88

AGENCY/DEPARTMENT Middlesex County

SUBMITTED BY DiNisco Kretsch and Associates DATE 3/3/83

I PRIORITY	II PROJECT DESCRIPTION AND LOCATION	III PROJECT SIZE	IV CAPACITY	V MAINTENANCE & OPERATION COST	VI STAFFING NUMBER & COST	VII REVENUES AND OR FEDERAL FUNDS	VIII INDICATE PRIOR PHASE COMPLETED OR IN PROGRESS	IX PROPOSED PROGRAM: REQUEST PURPOSE AND AMOUNT REQUEST PURPOSE KEY (INSERT KEY NUMBER IN YEAR BEING REQUESTED.)					
								(1) Program (2) Study (3) Land (4) Plans (5) Construction (6) Total Project Request					
								X 1983-84	X 1984-85	XI 1985-86	XII 1986-87	XIII 1987-88	XIV TOTALS
44	Renov. for maint. (A,E); main bldg., County Hospital, Waltham.							(4) 61,058	(5) 702,166			(6) 763,224	
45	Renov. for maint. (A,P,E) and energy (A); Superior Court, Cambridge.							(4) 41,774	(5) 480,395			(6) 522,169	
46	Renov. for maint. (A,P,E) and energy (A); Superior Court, Lowell.							(4) 32,065	(5) 368,745			(6) 400,810	
47	Renov. for maint. (A,E) and energy (A); District Court, Lowell.							(4) 22,040	(5) 253,460			(6) 275,500	
48	Renov. for maint. (A,P,E); Main bldg., House of Correction, Billerica.							(4) 30,250	(5) 347,875			(6) 378,125	
49	Renov. for maint. (E); District Court, Newton.							(4) 8,583	(5) 98,706			(6) 107,289	
50	Renov. for maint. (A,P,E,H) and energy (A); District Court Framingham.							(4) 8,272	(5) 95,126			(6) 103,398	
<b>TOTALS</b>													

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The Commonwealth of Massachusetts

FORM LRP-3  
SHEET 9 OF 16

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FOR YEARS 1983-84 to 1987-88

AGENCY DEPARTMENT Middlesex County

SUBMITTED BY DiNisco Kretsch and Associates DATE 3/3/83

I PRIORITY	II PROJECT DESCRIPTION AND LOCATION	III PROJECT SIZE	IV CAPACITY	V MAINTENANCE & OPERATION COST	VI STAFFING NUMBER & COST	VII REVENUES AND/OR FEDERAL FUNDS	VIII INDICATE PRIOR PHASE COMPLETED OR IN PROGRESS	PROPOSED PROGRAM: REQUEST PURPOSE AND AMOUNT					
								REQUEST PURPOSE KEY (INSERT KEY NUMBER IN YEAR BEING REQUESTED.)					
								(1) Program (2) Study (3) Land (4) Plans (5) Construction (6) Total Project Request					
								IX 1983-84	X 1984-85	XI 1985-86	XII 1986-87	XIII 1987-88	XIV TOTALS
51	Renov. for maint. (A,P,E) and energy (A); District Court Waltham.								(4) 15,801	(5) 181,717			(6) 197,518
52	Renov. for life safety (A); work release bldgs., House of Correction Billerica.								(4) 800	(5) 9,200			(6) 10,000
53	Renov. for maint. (P,E) and energy (A); Dormitory, House of Correction, Billerica.								(4) 2,457	(5) 28,256			(6) 30,713
54	Renov. for maint. (A,E) and energy (A); District Court, Woburn.								(4) 3,179	(5) 36,556			(6) 39,735
55	Renov. for maint. (A,E,H) and energy (A); District Court Somerville.								(4) 2,052	(5) 23,601			(6) 25,653
56	Renov. for security (E) and maint. (A); District Court, Marlboro.								(4) 2,886	(5) 33,193			(6) 36,079
57	Renov. for maint. (P,E) and energy (A); District Court, Malden.								(4) 4,797	(5) 55,166			(6) 59,963
TOTALS													

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The Commonwealth of Massachusetts

FORM LRP-3  
SHEET 10 OF 16

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FOR YEARS 1983-84 to 1987-88

AGENCY DEPARTMENT Middlesex County

SUBMITTED BY DiNisco Kretsch and Associates DATE 3/3/83

PRIORITY	PROJECT DESCRIPTION AND LOCATION	PROJECT SIZE	CAPACITY	MAINTENANCE & OPERATION COST	STAFFING NUMBER & COST	REVENUES AND OR FEDERAL FUNDS	INDICATE PRIOR PHASE COMPLETED OR IN PROGRESS	PROPOSED PROGRAM: REQUEST PURPOSE AND AMOUNT					
								REQUEST PURPOSE KEY (INSERT KEY NUMBER IN YEAR BEING REQUESTED.)					
								(1) Program	(2) Study	(3) Land	(4) Plans	(5) Construction	(6) Total Project Request
I	II	III	IV	V	VI	VII	VIII	IX 1983-84	X 1984-85	XI 1985-86	XII 1986-87	XIII 1987-88	XIV TOTALS
58	Renov. for maint. (E); District Court Concord.								(4) 2,728	(5) 31,370			(6) 34,098
59	Renov. for security (E) and energy (A); District Court, Ayer.								(4) 1,971	(5) 22,667			(6) 24,638
60	Renov. for maint. (A,E) and energy(A); All bldgs., Multi-Service Center, Chelmsford.								(4) 3,692	(5) 42,458			(6) 46,150
61	Renov. for maint. (A,P,E) and energy (A); all bldgs., County Extension Service, Concord.								(4) 1,325	(5) 15,246			(6) 16,571
62	Renov. for life safety (A), and maint. (A,P,E); Misc. bldgs., County Hospital, Waltham.								(4) 13,428	(5) 154,422			(6) 167,850
63	Renov. for maint. (A,E) and arch. barriers (E); main bldgs., County Hospital, Waltham									(4) 16,806	(5) 193,269		(6) 210,075
TOTALS													

A = Architectural  
P = Plumbing

E = Electrical  
H = Heating, Ventilating & Air Conditioning











The Commonwealth of Massachusetts

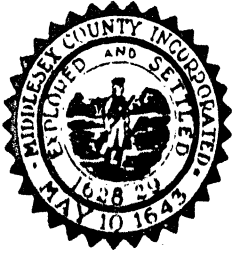
FORM LRP-3  
SHEET 16 OF 16

LONG RANGE CAPITAL FACILITIES DEVELOPMENT PLAN FOR YEARS 1983-84 to 1987-88

AGENCY DEPARTMENT Middlesex County

SUBMITTED BY DiNisco Kretsch and Associates DATE 3/3/83

I PRIORITY	II PROJECT DESCRIPTION AND LOCATION	III PROJECT SIZE	IV CAPACITY	V MAINTENANCE & OPERATION COST	VI STAFFING NUMBER & COST	VII REVENUES AND OR FEDERAL FUNDS	VIII INDICATE PRIOR PHASE COMPLETED OR IN PROGRESS	PROPOSED PROGRAM: REQUEST PURPOSE AND AMOUNT					
								REQUEST PURPOSE KEY (INSERT KEY NUMBER IN YEAR BEING REQUESTED.)					
								(1) Program	(2) Study	(3) Land	(4) Plans	(5) Construction	(6) Total Project Request
								IX 1983-84	X 1984-85	XI 1985-86	XII 1986-87	XIII 1987-88	XIV TOTALS
95	Renov. for maint. (A,E), and energy (P); all bldgs., Multi Service Ctr., Chelmsford										(4) 2,510	(5) 28,865	(6) 31,375
96	Renov. for maint. (A,P,E) and energy (A,P); misc. bldgs., County Hospital, Waltham										(4) 3,335	(5) 38,353	(6) 41,688
97	Renov. for maint. (A) and energy (P) misc. bldgs., House of Corrections, Billerica											(5) 15,525	(6) 15,525
98	Renov. for maint. (A,P,E) and arch. barriers (A); all bldgs., Extension Service, Concord										(4) 1,697	(5) 19,511	(6) 21,208
TOTALS								594,656	6,947,852	3,114,979	637,557	1,536,407	12,831,451



Commonwealth of Massachusetts  
County of Middlesex

OFFICE OF THE COUNTY COMMISSIONERS  
SUPERIOR COURTHOUSE  
EAST CAMBRIDGE, MASSACHUSETTS 02141

THOMAS J. LARKIN, Bedford  
Chairman  
MICHAEL E. MCLAUGHLIN, Lowell  
BILL SCHMIDT, Newton

March 29, 1983

Dear Advisory Board Member:

We are enclosing a copy of the DiNisco Kretsch Capital Facilities Condition Inspection and Projection Report for your information in accordance with the resolution which was passed at the MCAB Meeting on March 22, 1983. We will be developing a plan based on the information to make necessary improvements on the buildings for the next five years within the next six months.

If you have any suggestions or comments on this matter, please don't hesitate to contact the Board.

Sincerely,

Thomas J. Larkin  
Michael E. McLaughlin  
Bill Schmidt

Middlesex County Commissioners

4. S - 234

Comm. from Thomas J. Larkin, Chairman, Middlesex County Commissioners transmitting for informational purposes the DiNisco Kretsch Capital Facilities Condition Inspection and Projection Report.

In City Council,

April 25, 1983

4/25/83

Placed on File