COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM · NEW YORK

FINAL REPORT
APPENDIX H

CRIMINAL COURTS BUILDING

100 CENTRE STREET
NEW YORK

Appendix A

ENGINEERING STUDIES

Appendix A
ENGINEERING STUDIES

An engineering investigation of the Criminal Court Building was conducted of the heating, ventilating, and air conditioning systems, and of the electrical and plumbing system. In general, with moderate expenditures, improvements can be made in the existing systems to meet the building's service requirements for the next 30 years.

Heating, Ventilating and Air Conditioning Systems

The heating system is fired by four boilers, each having a nominal rating of 706 boiler horsepower. One boiler is capable of meeting the building's normal requirements. During low demand periods, steam is purchased from Con Edison via a utility piping system rather than firing a boiler. Steam is also sold to the utility via the same system upon request from Con Edison. The heating system is well maintained and in excellent condition.

Although the ventilating system is adequate, the air conditioning system has badly deteriorated. The existing air conditioning system consists of a single 750 ton compressor driven by an 800 HP electric motor, with no backup compressor, and three condensing water cooling ponds each designed for 320 tons. Analysis of data compiled during the summer months of 1970 indicate that the system has degraded from its original capacity of 750 tons to a marginal capacity of 300 tons. Since the equipment was not properly instrumented, this reduced capacity has been derived with the assumption that the pumps have not degraded and that the water flow is at design capacity.

During normal summer usage, the system in its present condition is just sufficient to handle the demand. However, for exceptionally hot, humid days it performs below acceptable standards. The poor performance of the system has been caused mainly by continual neglect in maintenance. Eventually, the unit will

become so contaminated as to cause complete breakdown of the system. Recommendations have been made to the Department of Public Works to clean and flush the existing system, properly instrument the units, and supply strainers at the spray pond pump inlets to assure proper performance and service in the future.

The present system will not be capable of handling the additional cooling load imposed by new courtrooms and ancillary spaces. It is estimated that an additional 300 ton compressor and cooling system is required to handle additional loads and serve as a backup for the existing system. Drawing AC-1 shows the existing and proposed changes to the air conditioning system. To handle the additional condensing water cooling requirements three proposals are under evaluation. In all cases a new condenser, water cooler and condensing water pump are required. Additional booster pumps and risers may be required, depending upon the proposed space planning recommendations.

Proposal A - Marley Cooling Tower

A study of available cooling towers indicates that a new Marley Tower, Model 8606, has the capacity to handle the additional condensing loads. The unit would be erected on the tank house roof, elevation 258 ft., as shown in Drawing AC-2. Due to the difference in elevation between this tower and the existing ponds, elevation 283 ft., a return booster pump will be required for system operation. This presents a problem at shutdown when the difference in elevation will cause drainage of the vertical inlet piping into the tower pan and possibly onto the tank house roof. Large losses of water will result in heavy usage of make-up water and require an increase in the capacity of the make-up water pump.

Proposal B - Clarage Air Washer

An alternative solution to the additional condensing load problem is the installation of a new Clarage Air Washer. The present system utilizes three Clarage Air Washers. The air washer is not specifically

designed for use as a cooling tower, but its capacity for evaporative cooling lends itself to that usage. The unit is not as efficient as a cooling tower and requires more power to achieve the same cooling results as a tower designed specifically for this purpose.

Proposal C - Improvement of Existing Air Washers

The third proposal and the recommended solution consists of reworking the present air washers to achieve more surface area for evaporation cooling. This is the most economic solution as it does not require new additional equipment other than that required for the reconstruction of the existing three Claridge units.

Investigation is presently under way to check whether the performance of these air washers can be increased to handle the additional 300 ton load and further investigation is being conducted.

Absorption Refrigeration System

The feasibility of utilizing an absorption refrigeration machine was investigated. The system operates on low fuel cost using steam which would be more desirous for summer usage than electricity. However, a steam absorption system was ruled out due to the excessive condenser heat rejection requirements. In general, the absorption machine would require approximately twice as much heat rejection as a motor driven refrigeration machine. The cooling tower used with the absorption machine would be approximately 75 percent larger than that used with the motor driven machine. The additional space and roof load to accommodate this larger tower are not available. The existing 12 inch water pipe and pumps would have to also be increased to handle the added heat load.

Electrical System

The electric light and power system is an alternating current 120/208 volt system with four wire mains and two wire branches. The power system is a 208 volt, three phase, 60 cycle, three wire system for all

motors except certain fractional horsepower motors which are on a single phase circuits. A 24 volt direct current service is provided for the watchman's clocks. The electrical service connections for light, power and DC service are housed in separate panels. Drawing EL-1 shows the wiring to the main switchboard from which power is taped off to the various light and power panels. The capacity of this system is 16,000 amperes (four wires at 4,000 amps per wire). Normal service for the building is approximately 3,720 amps, well below capacity.

In 1964, modifications were made to the lighting panels to add 208 volt service for window air conditioners and other heavy equipment such as duplicating machines. Table EL-2 shows the present spare breakers available for future expansion on each floor. It is broken down for each of the three electric closets located on each floor (north, central and south). This table indicates that there is adequate service to each floor and sufficient spares to handle future light and power requirements. In special cases such as electrical requirements for a new cooling tower, conduits may have to be run from other locations in the building.

Plumbing Systems

The plumbing system throughout the building consists of materials of excellent quality and has shown no sign of serious damaging wear through the years. A preliminary study indicates that the condenser piping is of adequate size to accommodate the additional capacity demanded by the proposed changes. Additional plumbing will be required for the new air conditioning equipment shown in Drawing AC-1. Future recommendations on spatial expansion and utilization will determine plumbing requirements for handling the additional capacity of new chilled water risers, booster pumps, toilets, and drinking water facilities.

Hot Water System

The present hot water system in the Criminal Court Building con-

sists of four steam-heated hot water heaters, as shown in Drawing PM-1. These heaters are thermostatically controlled and set for a 140± five degree fahrenheit temperature rise. Two heaters supplied directly from city water mains have a storage capacity of 1,125 gallons each and service the first, second and third floors. These heaters have a make-up water capacity of 750 gph. The fourth to the seventeenth floors are serviced by two additional heaters fed from the tank house, each having a capacity of 3,000 gallons storage with a make-up capacity of 2,500 gph. Each heater has a circulating pump manifolded in pairs according to which floors of the building they service. While all heaters operate at all times, only one pump from each group is used to circulate the water. These additional pumps serve as back-ups in the event of a pump failure. In each case one storage tank is sufficient to handle the floors it services.

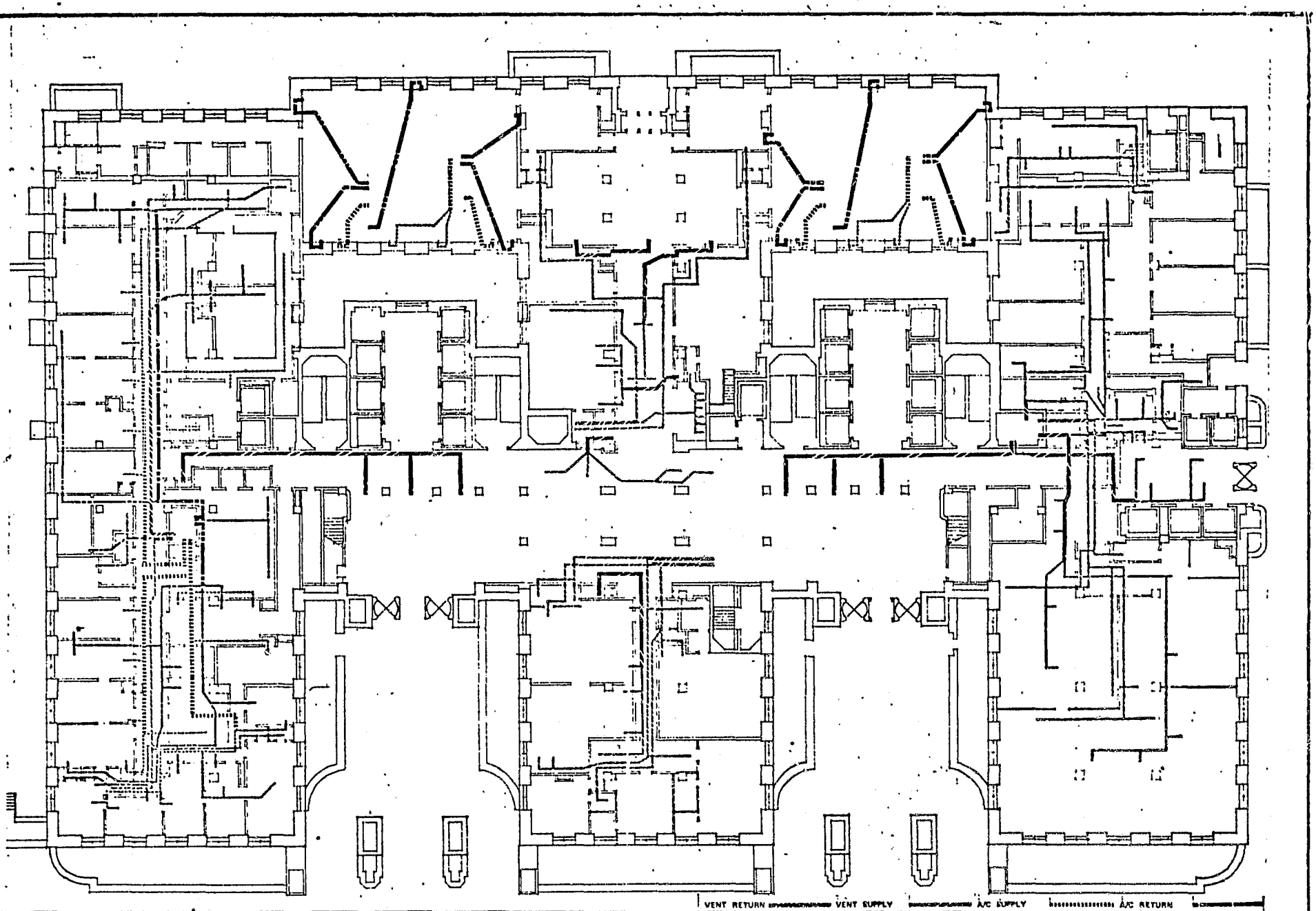
The equipment is in excellent condition except for the main cold water shutoff valves. Since these valves cannot be readily serviced, residue and other materials have been deposited in the valves which prevents full valve closure. This maintenance problem does not require immediate servicing, but will eventually have to be serviced.

Drinking Water System

The filtered drinking water system consists of three water coolers with a storage capacity of 150 gallons each. The system has the capacity of cooling 250 gph of water from 80 degrees fahrenheit to 45 degrees fahrenheit. Two pumps circulate 20 gpm each through six filters and supply the drinking fountains throughout the building. The system has not been functioning efficiently, and attempts to locate the problem have not been successful to date, but investigation is continuing.

The fire standpipe system is supplied from a 1,000 gpm, 200 HP, 208 volt, three phase, 60 cycle pump. Nine six inch and three short four inch risers are located in required stairs, corridors and

means of egress. Also included for the fire protection is a small automatic sprinkler system with fusible link heads supplied from the domestic water supply. There are two house tanks of 39,800 gallon total capacity with 3,500 gallon fire reserve in each.



COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM
111 CENTRE ST. NEW YORK, N.Y. 10013

SCALE
0 5 15 25 50 FEET

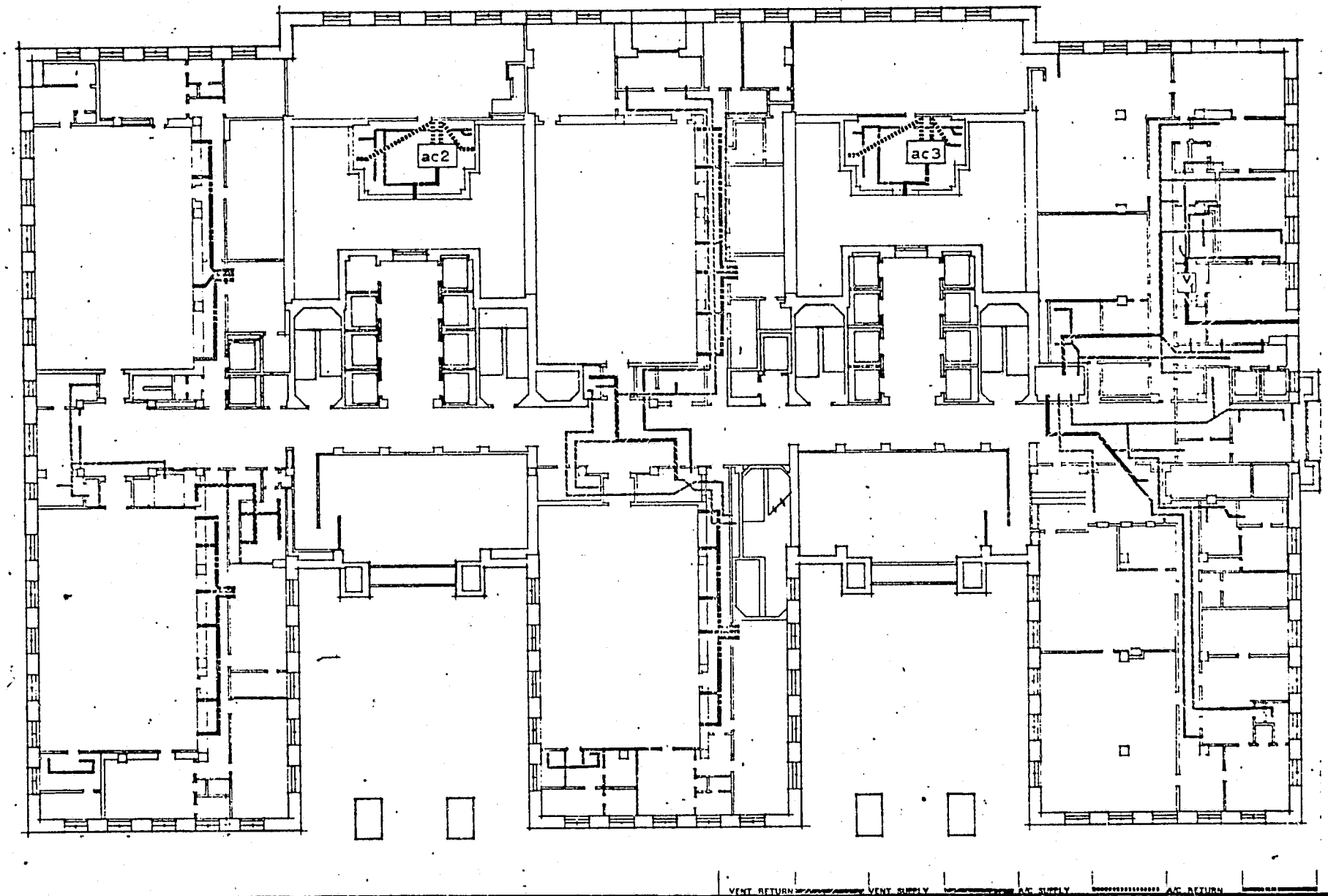
NORTH

MANHATTAN CRIMINAL COURT BUILDING
100 CENTRE ST. NEW YORK, N.Y. 10013
EXISTING H.V.A.C. SYSTEM

DWG. NO. HV–1

FLOOR 1

A-7



COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM
111 CENTRE ST. NEW YORK, N.Y. 10013

SCALE
0 5 15 25 50 FEET

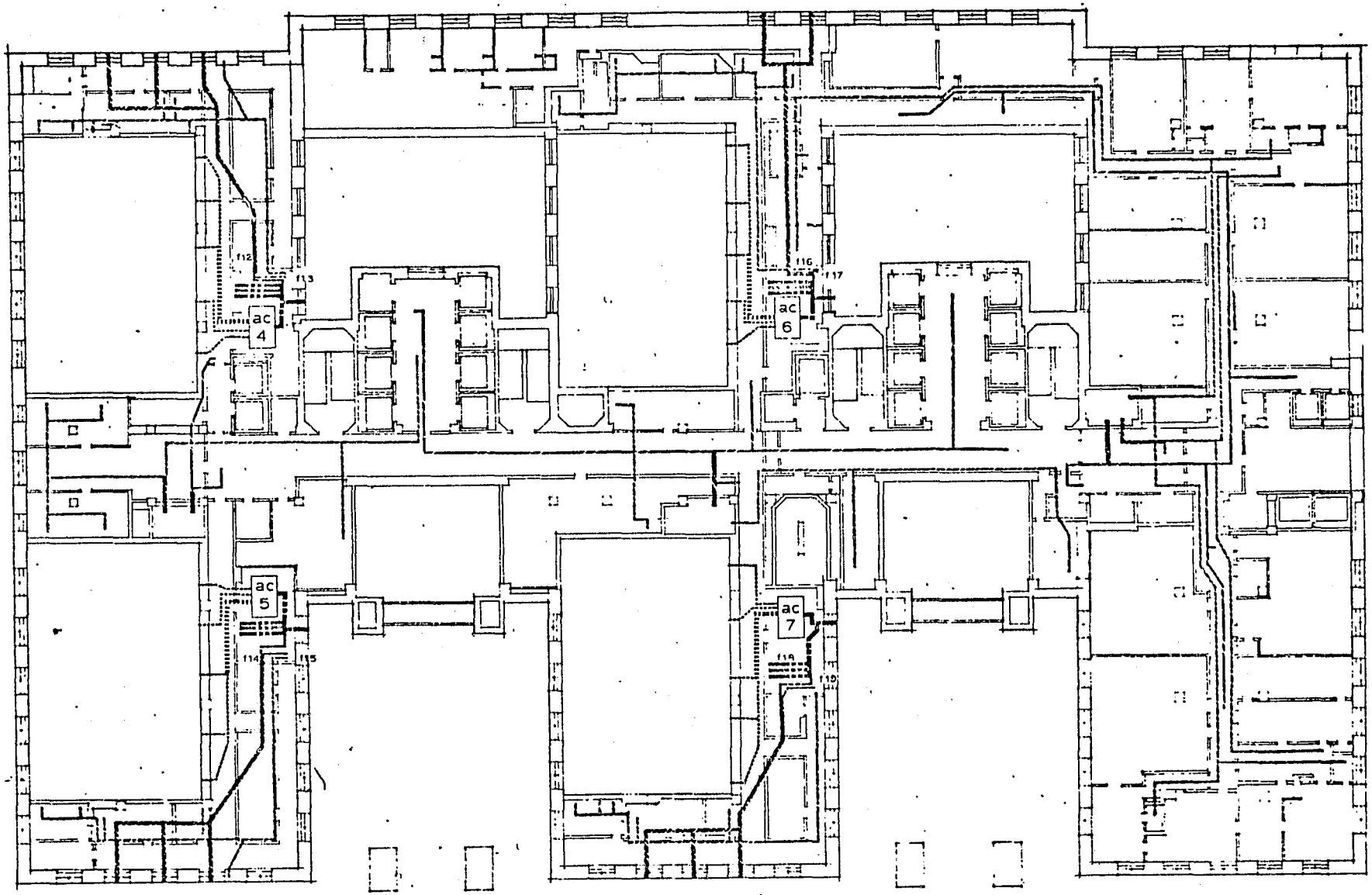
NORTH

MANHATTAN CRIMINAL COURT BUILDING
100 CENTRE ST. NEW YORK, N.Y. 10013
EXISTING H.V.A.C. SYSTEM

DWG. NO. HV–2

FLOOR 2

A-8



COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM
111 CENTRE ST. NEW YORK, N.Y. 10013

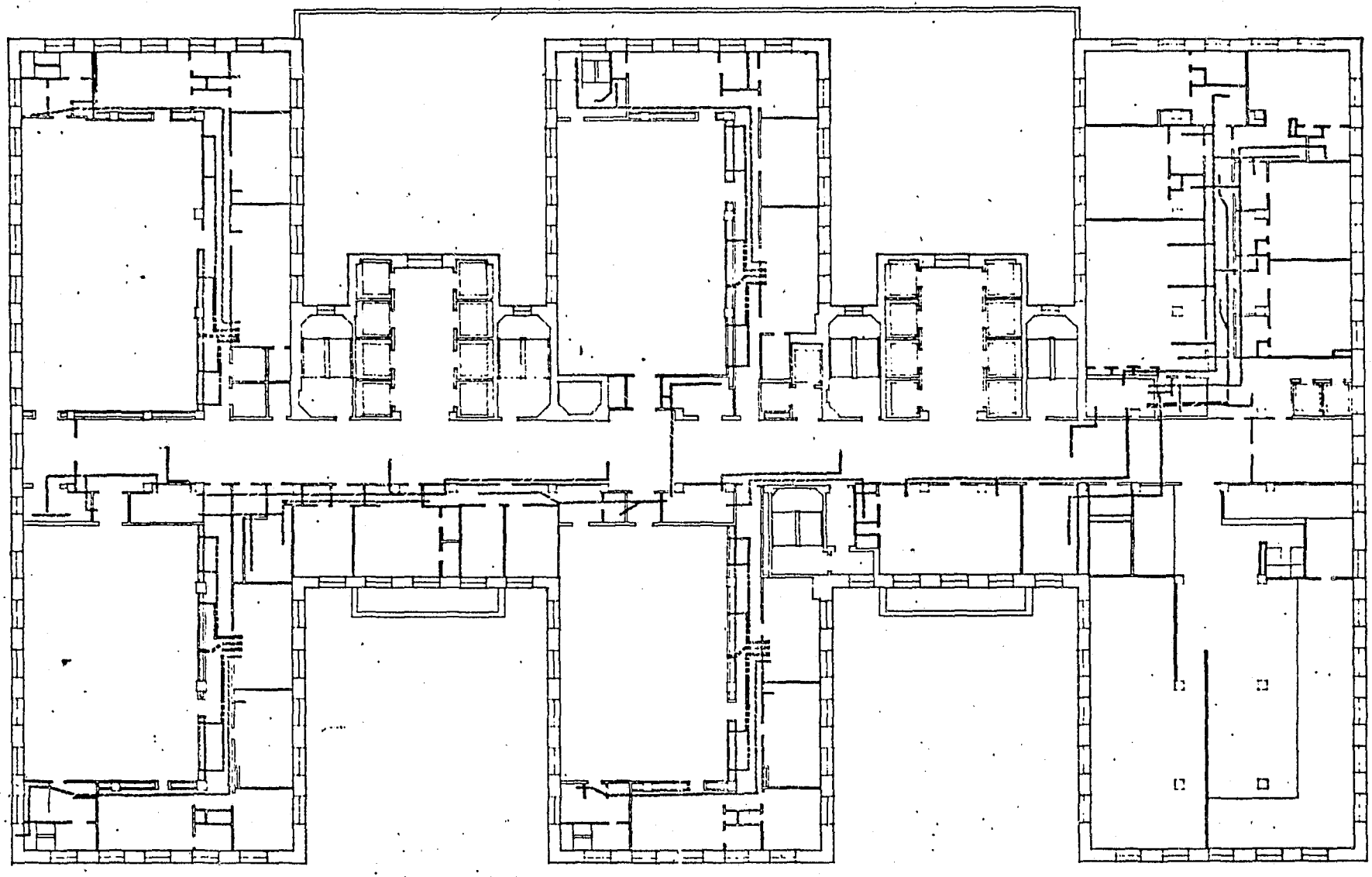
SCALE 0 5 15 25 50 FEET

NORTH

MANHATTAN CRIMINAL COURT BUILDING
100 CENTRE ST. NEW YORK, N.Y. 10013
EXISTING H.V.A.C. SYSTEM

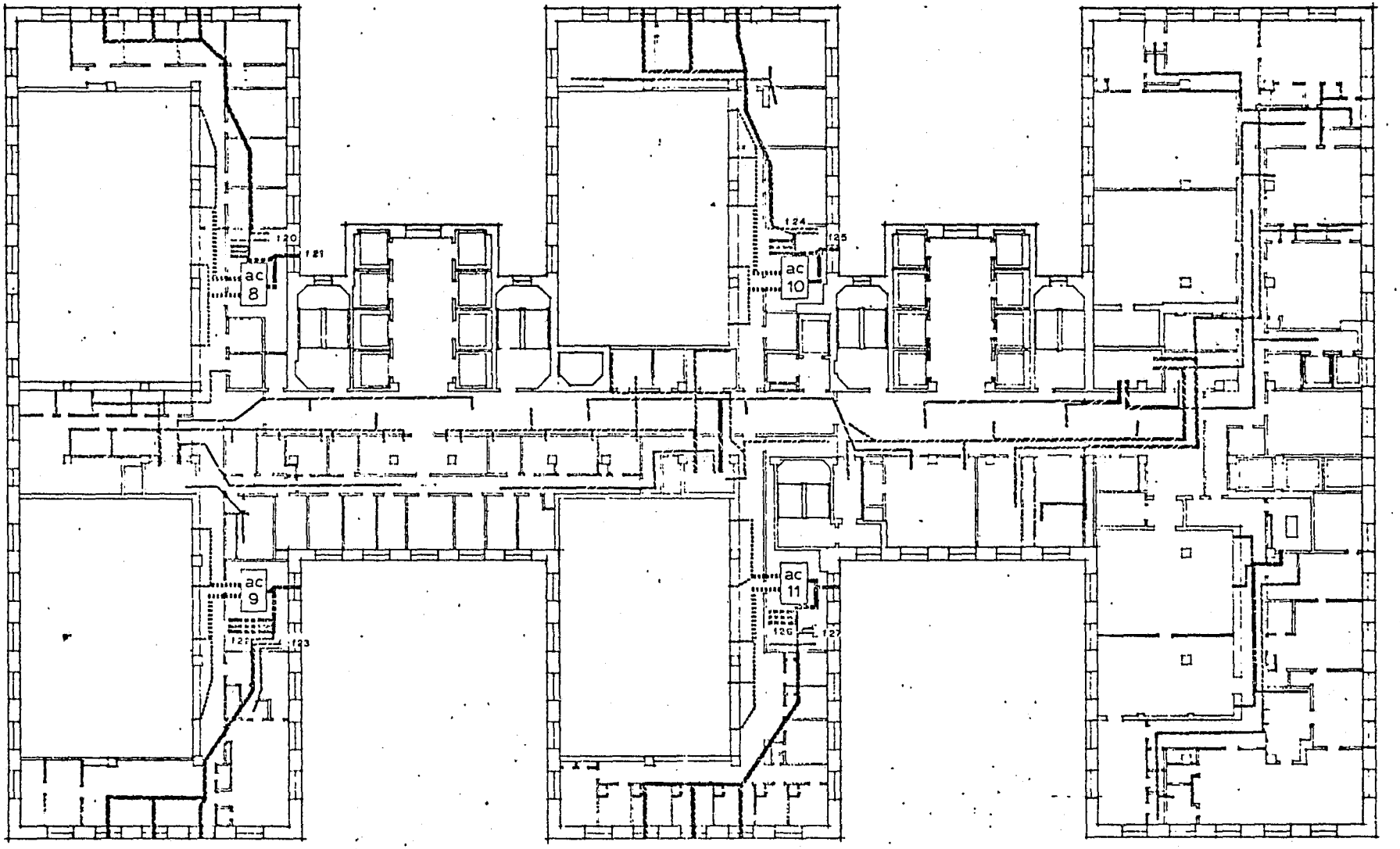
DWG. NO. HV–3

FLOOR 3



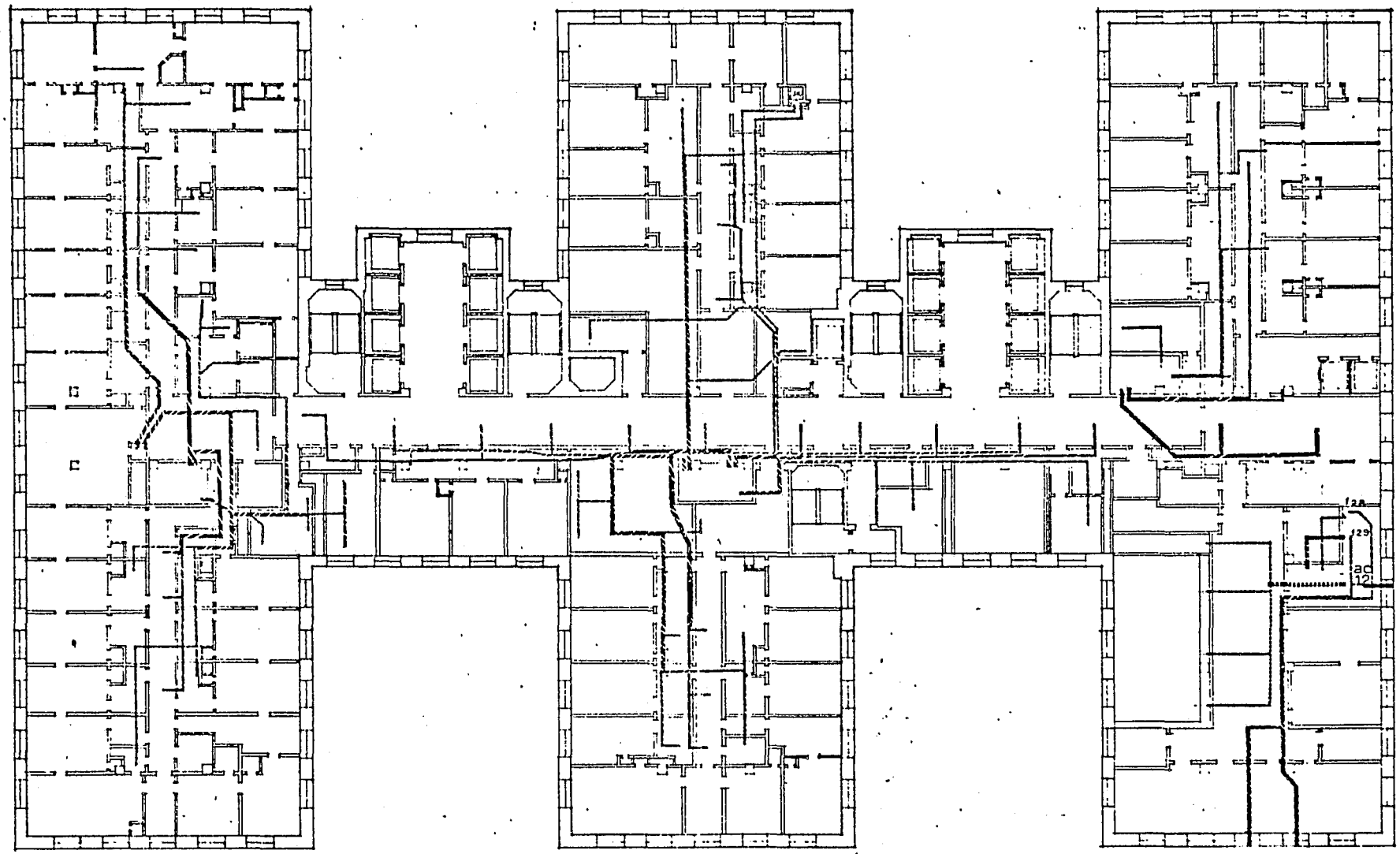
VENT. RETURN — VENT. SUPPLY — A/C SUPPLY — A/C RETURN

COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM 111 CENTRE ST. NEW YORK, N.Y. 10013	SCALE 0 5 15 25 50 FEET NORTH	MANHATTAN CRIMINAL COURT BUILDING 100 CENTRE ST. NEW YORK, N.Y. 10013 EXISTING H.V.A.C. SYSTEM	DWG. NO. HV–4	FLOOR 4



COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM 111 CENTRE ST. NEW YORK, N.Y. 10013	SCALE 0 5 15 25 50 FEET NORTH	MANHATTAN CRIMINAL COURT BUILDING 100 CENTRE ST. NEW YORK, N.Y. 10013 EXISTING H.V.A.C. SYSTEM	DWG. NO. HV–5	FLOOR 5

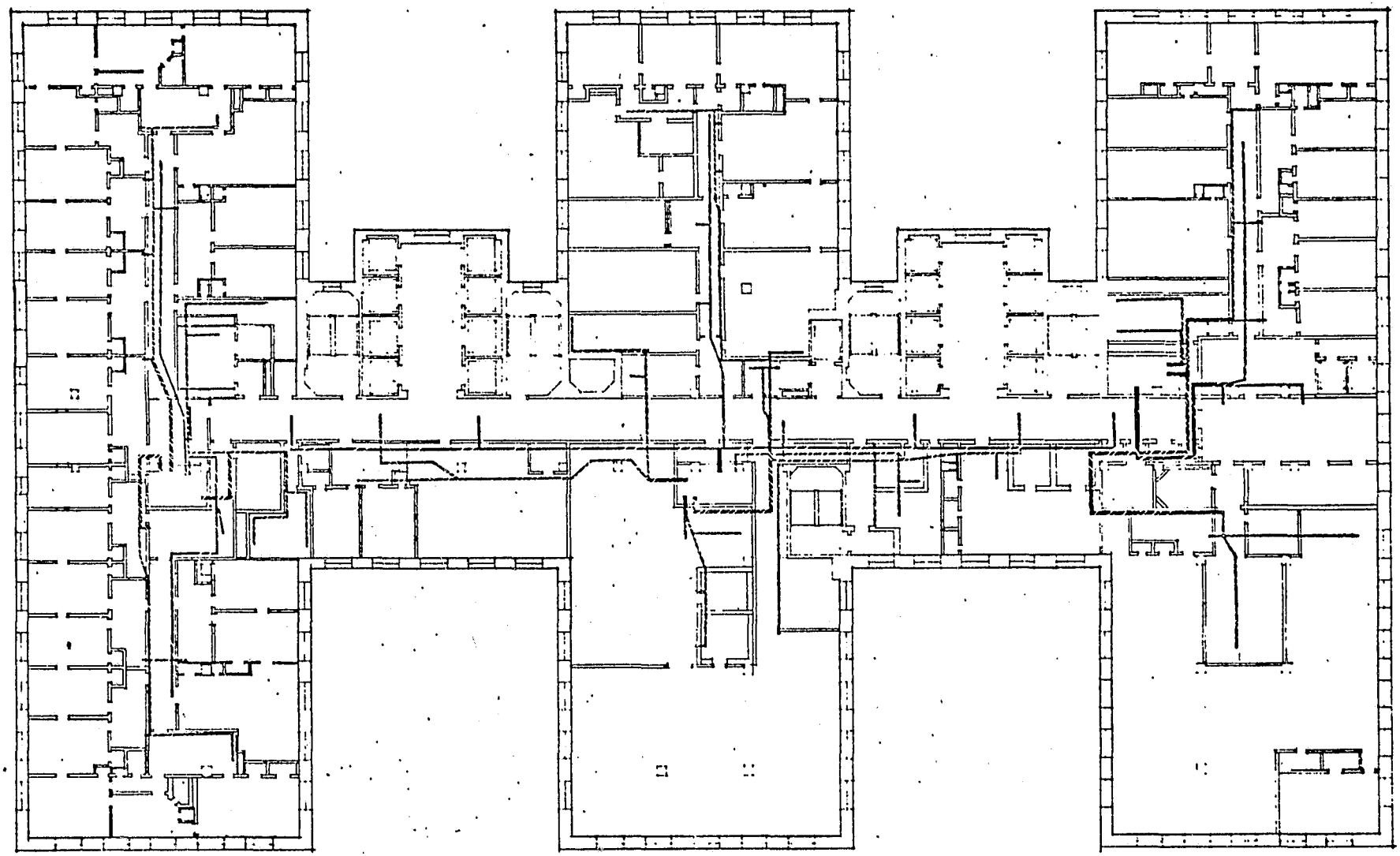
A-11



VENT RETURN VENT SUPPLY A/C SUPPLY A/C RETURN

COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM 111 CENTRE ST. NEW YORK, N.Y. 10013	SCALE 0 5 15 25 50 FEET NORTH	MANHATTAN CRIMINAL COURT BUILDING 100 CENTRE ST. NEW YORK, N.Y. 10013 EXISTING H.V.A.C. SYSTEM	DWG. NO. HV–6	FLOOR 6

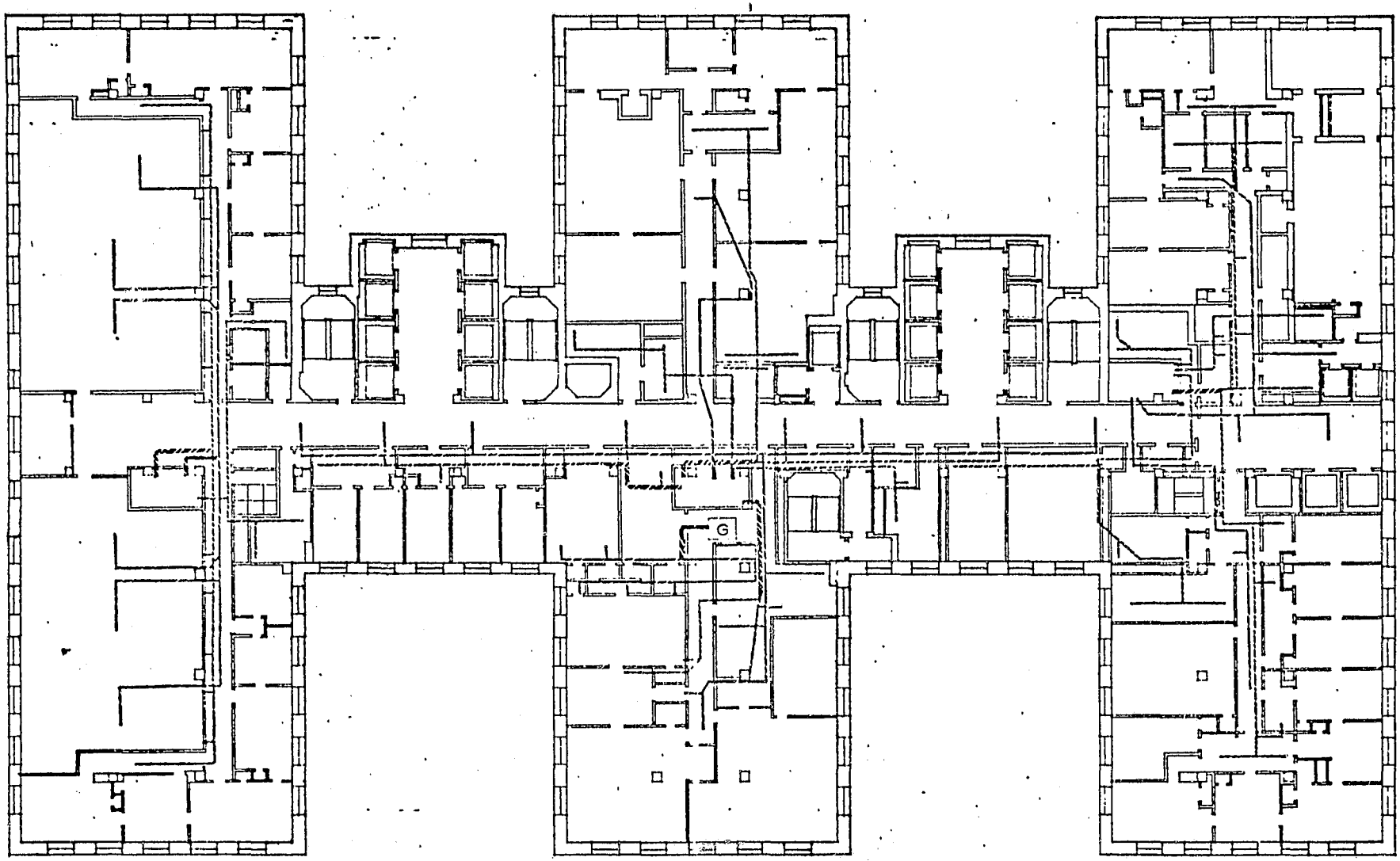
A-12



VENT RETURN — VENT SUPPLY — A/C SUPPLY — A/C RETURN

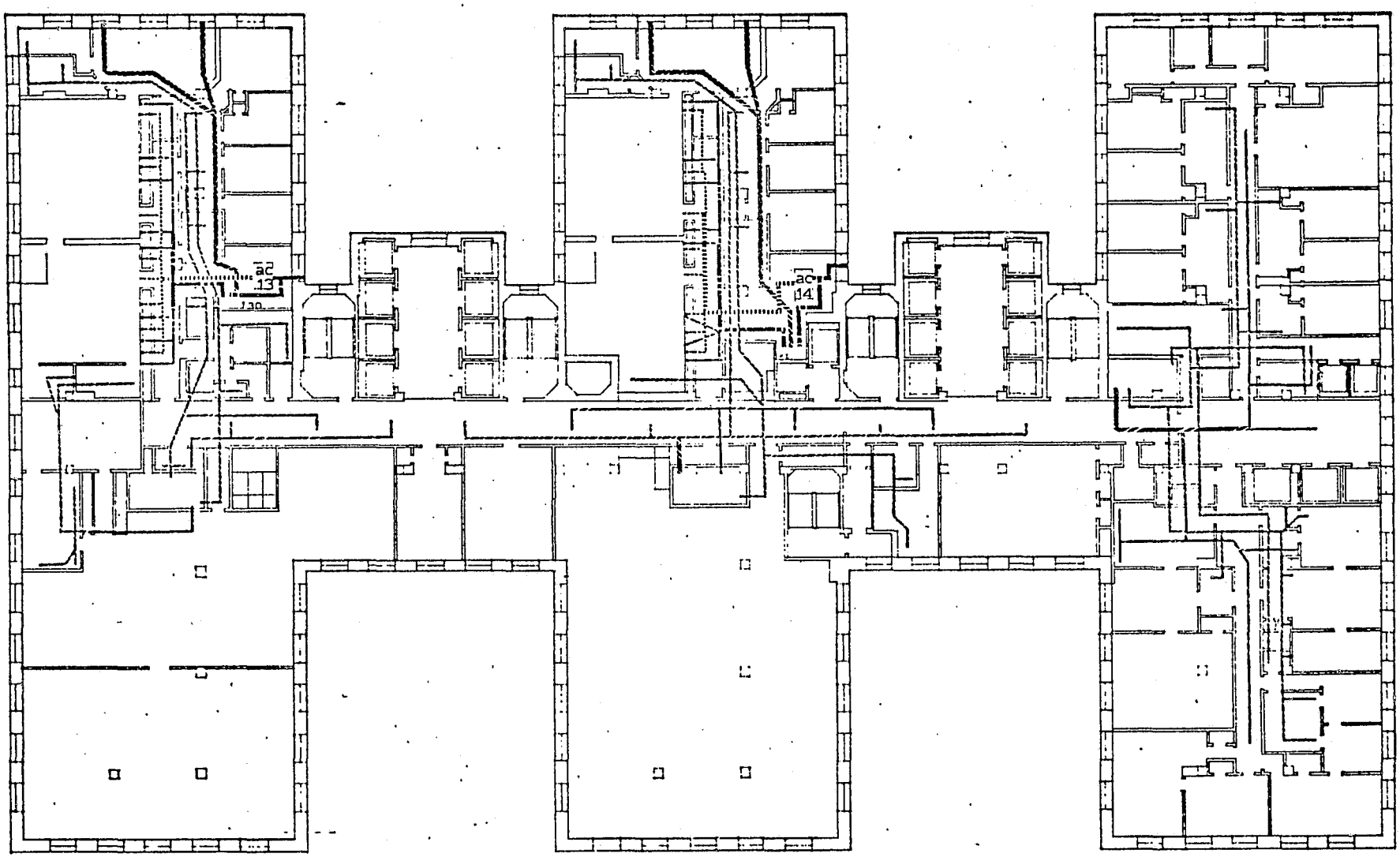
COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM 111 CENTRE ST. NEW YORK, N.Y. 10013	SCALE 0 5 15 25 50 FEET NORTH	MANHATTAN CRIMINAL COURT BUILDING 100 CENTRE ST. NEW YORK, N.Y. 10013 EXISTING H.V.A.C. SYSTEM	DWG. NO. HV–7	FLOOR 7

A-13



VENT. RETURN — VENT. SUPPLY — A/C SUPPLY — A/C RETURN

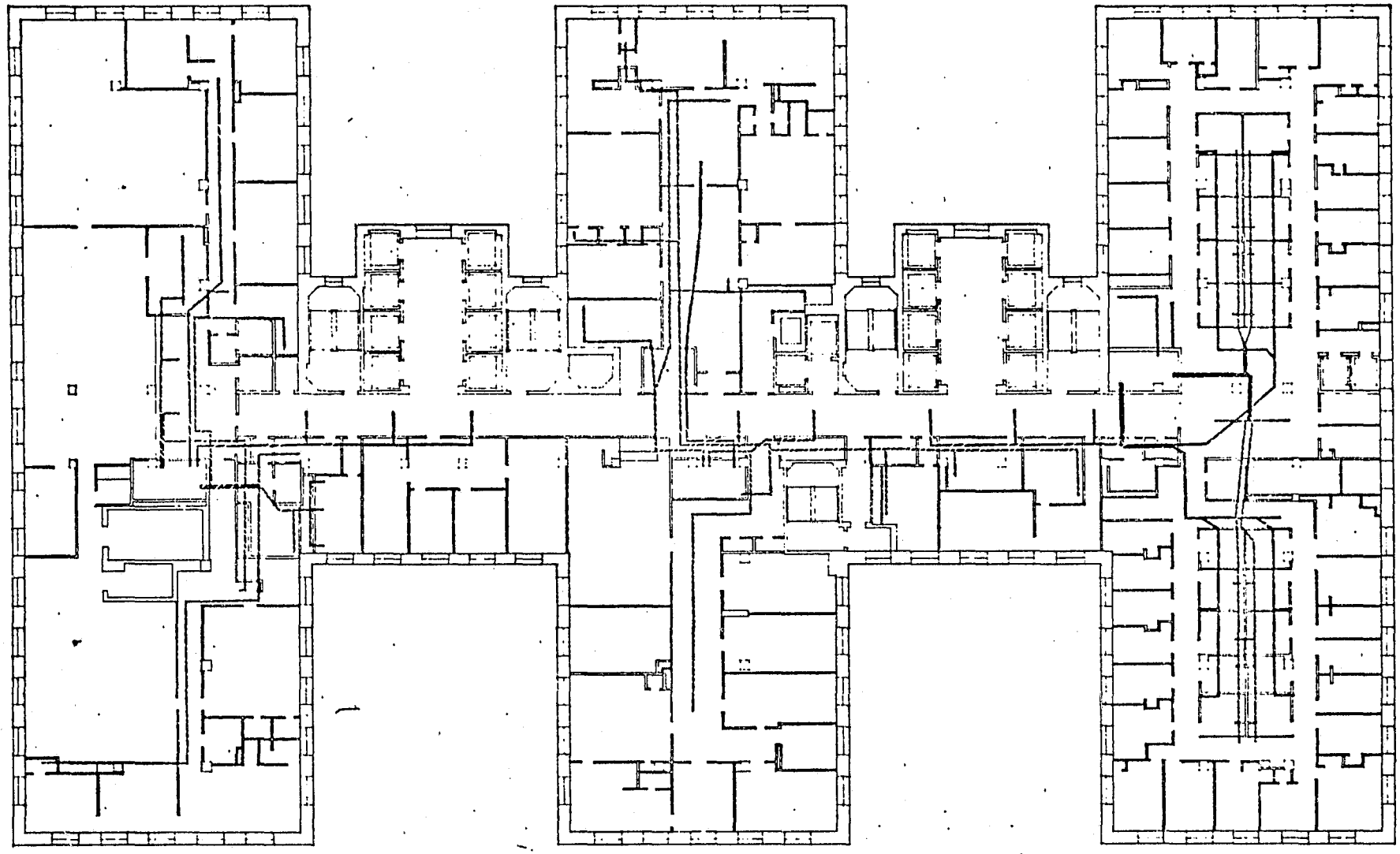
COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM 111 CENTRE ST. NEW YORK, N.Y. 10013	SCALE 0 5 15 25 50 FEET NORTH	MANHATTAN CRIMINAL COURT BUILDING 100 CENTRE ST. NEW YORK, N.Y. 10013 EXISTING H.V.A.C. SYSTEM	DWG. NO. HV–8	FLOOR 8



VENT RETURN | VENT SUPPLY | A/C SUPPLY | A/C RETURN

COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM 111 CENTRE ST. NEW YORK, N.Y. 10013	SCALE 0 5 15 25 50 FEET — NORTH	MANHATTAN CRIMINAL COURT BUILDING 100 CENTRE ST. NEW YORK, N.Y. 10013 EXISTING H.V.A.C. SYSTEM	DWG. NO. HV–9	FLOOR 9

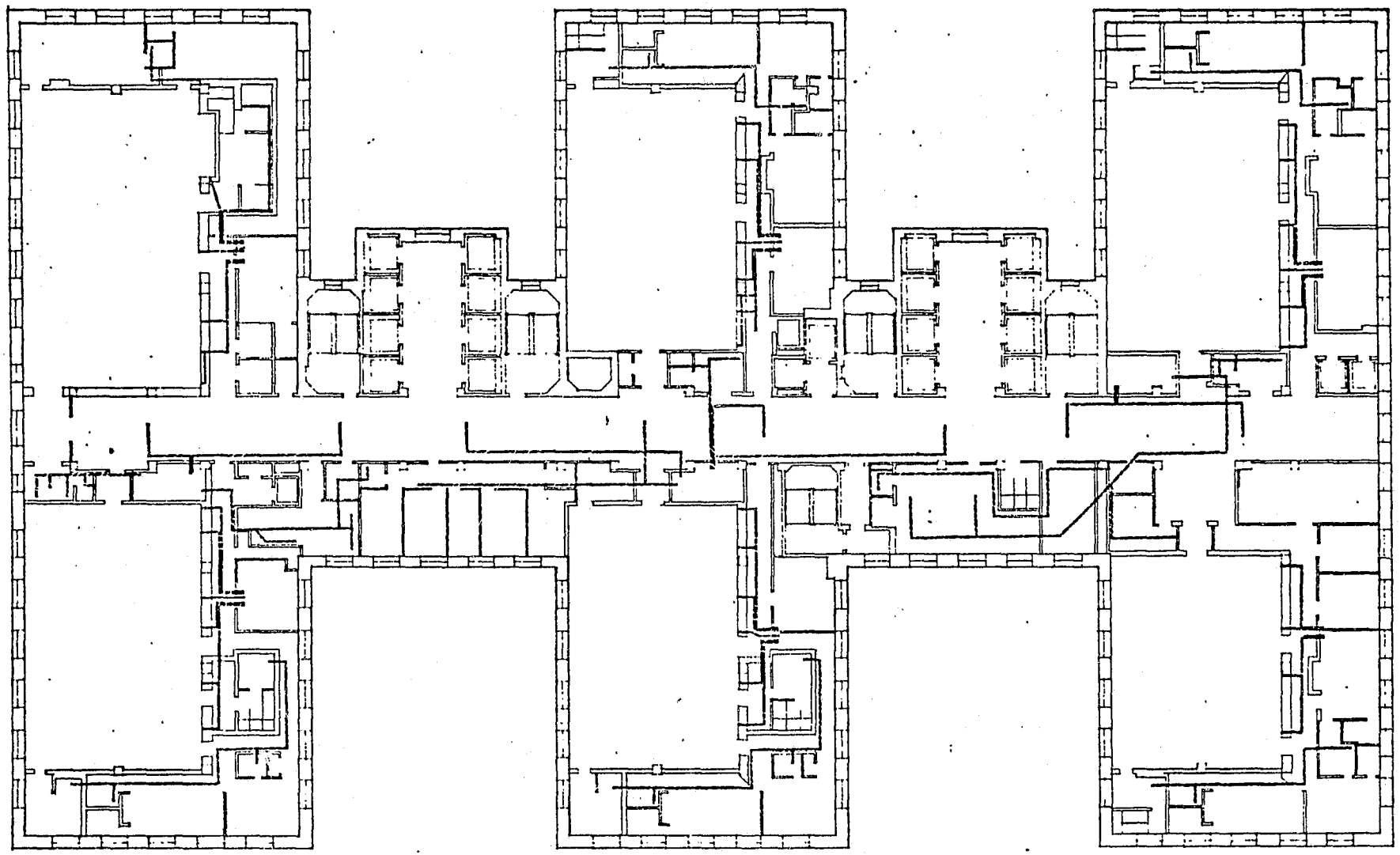
A-15



VENT RETURN — VENT SUPPLY — A/C SUPPLY — A/C RETURN

COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM 111 CENTRE ST. NEW YORK, N.Y. 10013	SCALE 0 5 15 25 50 FEET	NORTH	MANHATTAN CRIMINAL COURT BUILDING 100 CENTRE ST. NEW YORK, N.Y. 10013 EXISTING H.V.A.C. SYSTEM	DWG. NO. HV-10	FLOOR 10

A-16



VENT RETURN VENT SUPPLY A/C SUPPLY A/C RETURN

COURTHOUSE REORGANIZATION
AND RENOVATION PROGRAM
111 CENTRE ST. NEW YORK, N.Y. 10013

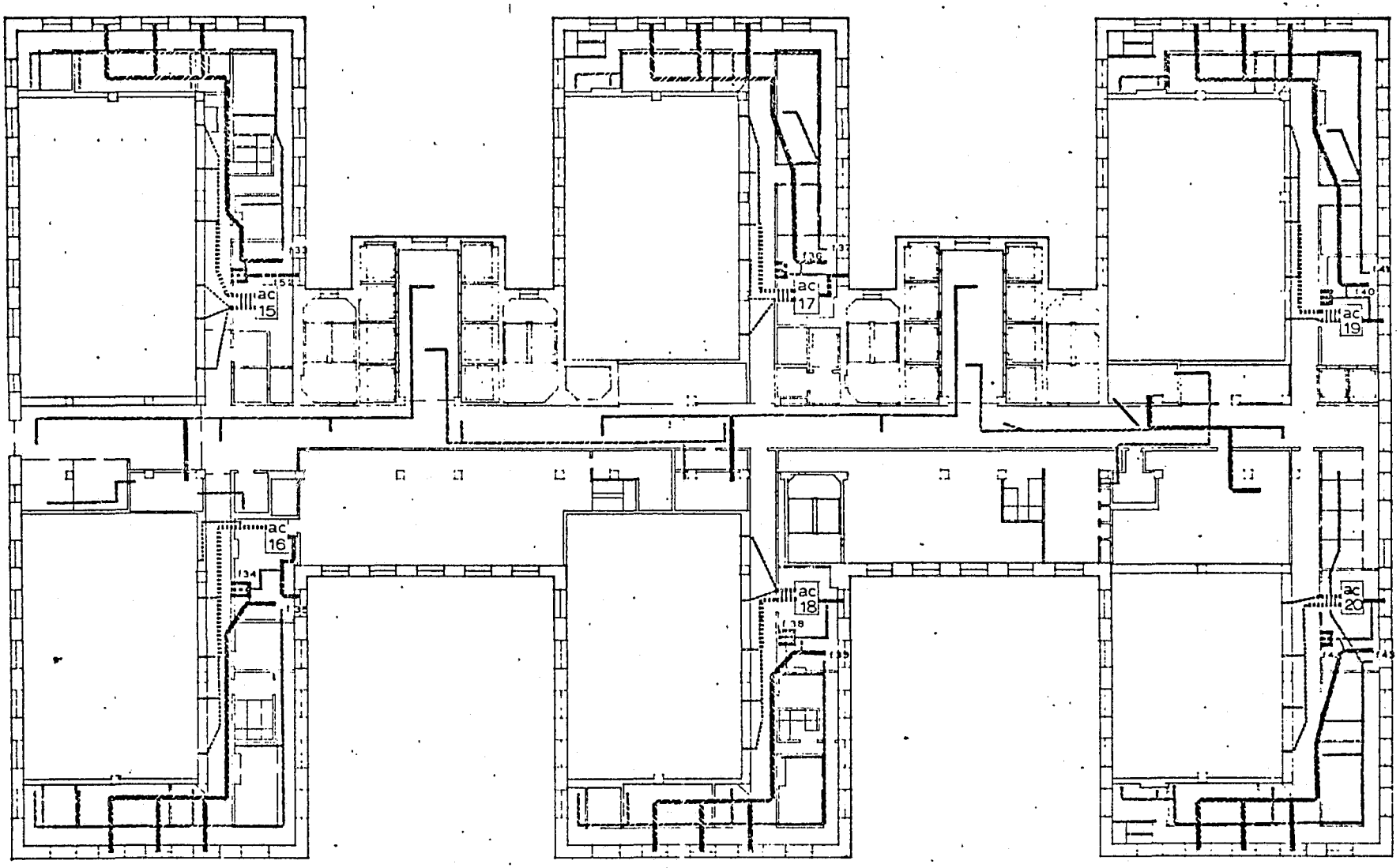
SCALE
0 5 15 25 50 FEET
NORTH

MANHATTAN CRIMINAL COURT BUILDING
100 CENTRE ST. NEW YORK, N.Y. 10013
EXISTING H.V.A.C. SYSTEM

DWG. NO. HV-11

FLOOR 11

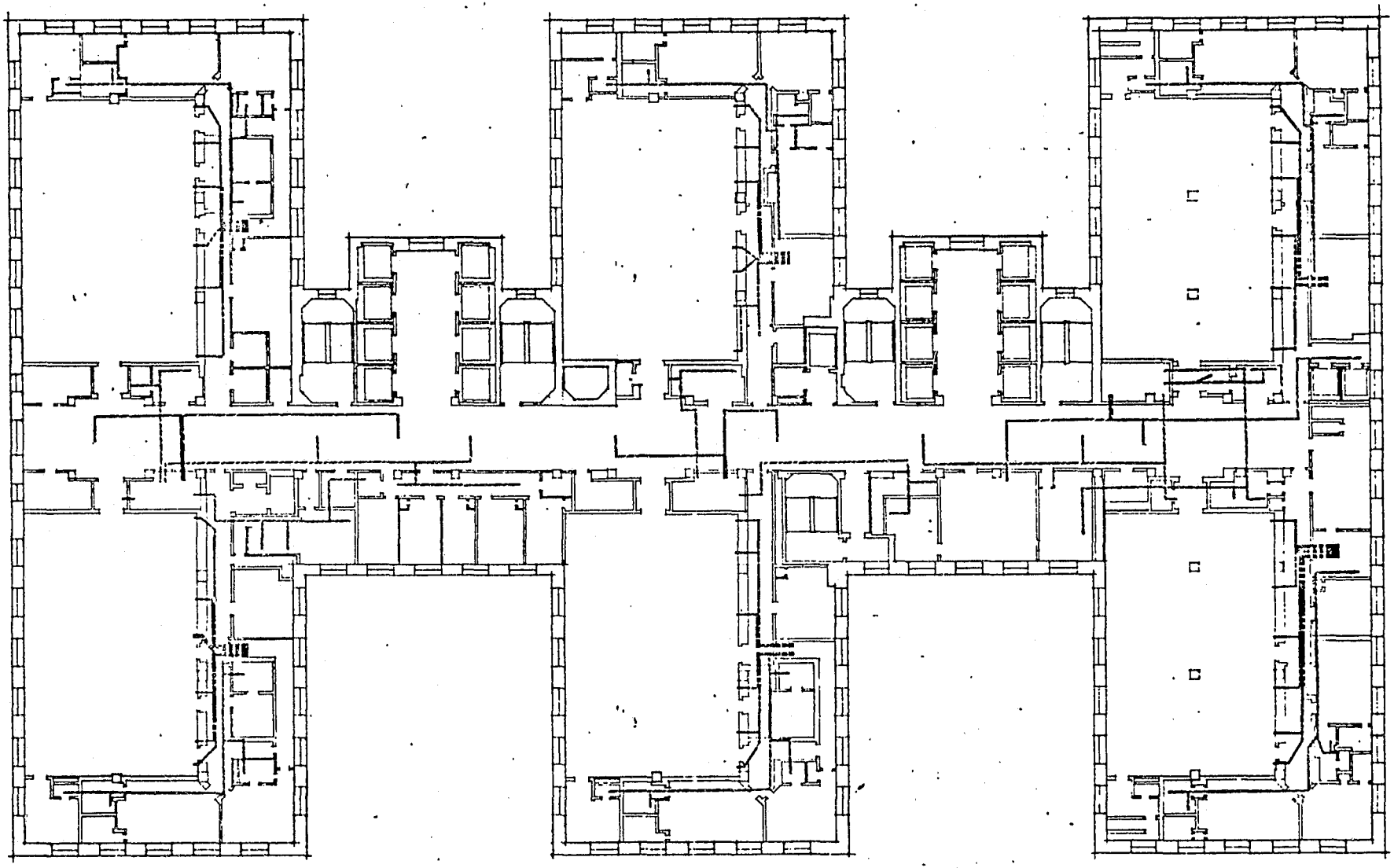
A-17



VENT RETURN — VENT SUPPLY — A/C SUPPLY — A/C RETURN

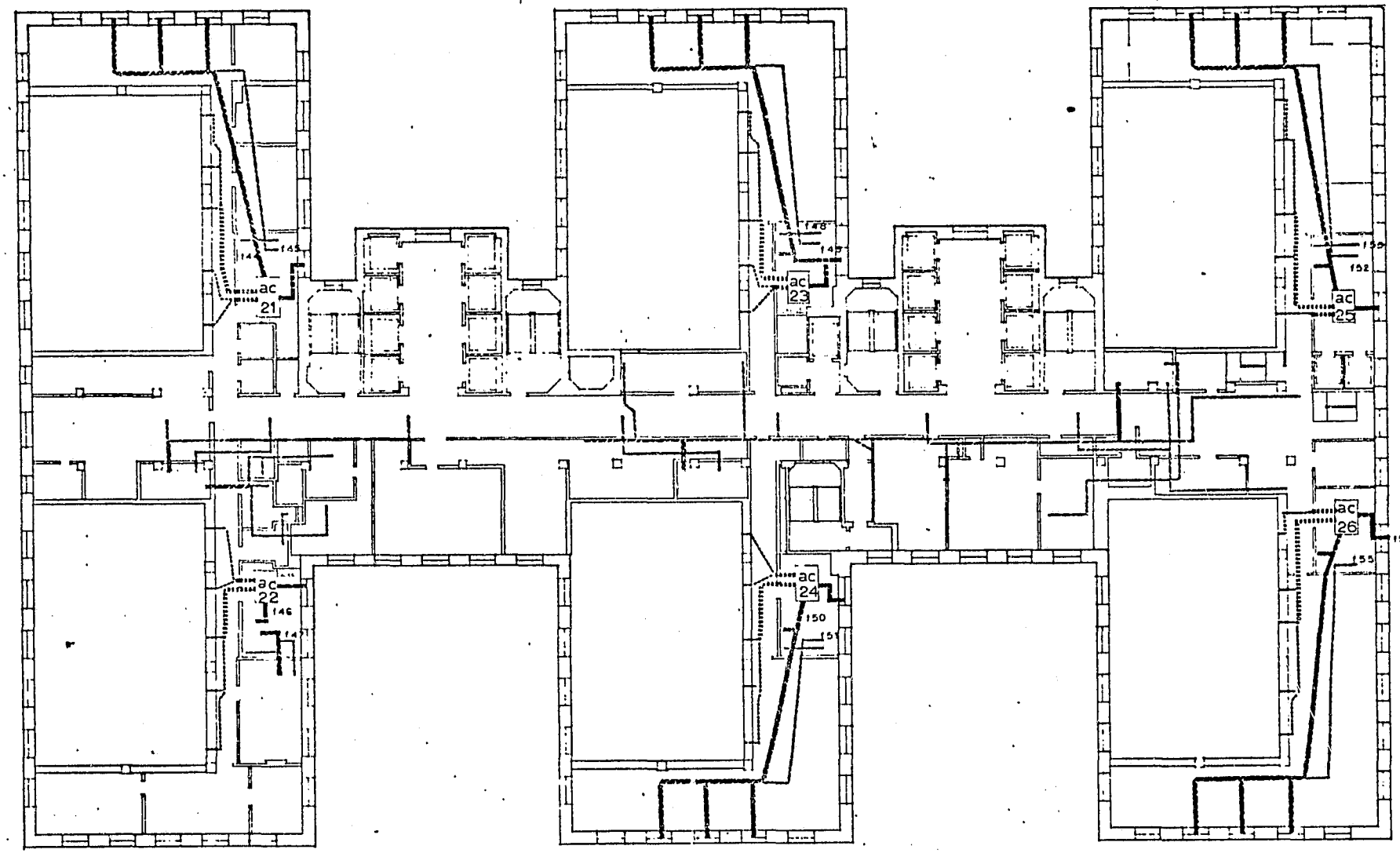
COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM 111 CENTRE ST. NEW YORK, N.Y. 10013	SCALE 1" = 0 5 15 25 50 FEET NORTH	MANHATTAN CRIMINAL COURT BUILDING 100 CENTRE ST. NEW YORK, N.Y. 10013 EXISTING H.V.A.C. SYSTEM	DWG. NO. HV-12	FLOOR 12

A-18



VENT RETURN — VENT SUPPLY — A/C SUPPLY — A/C RETURN

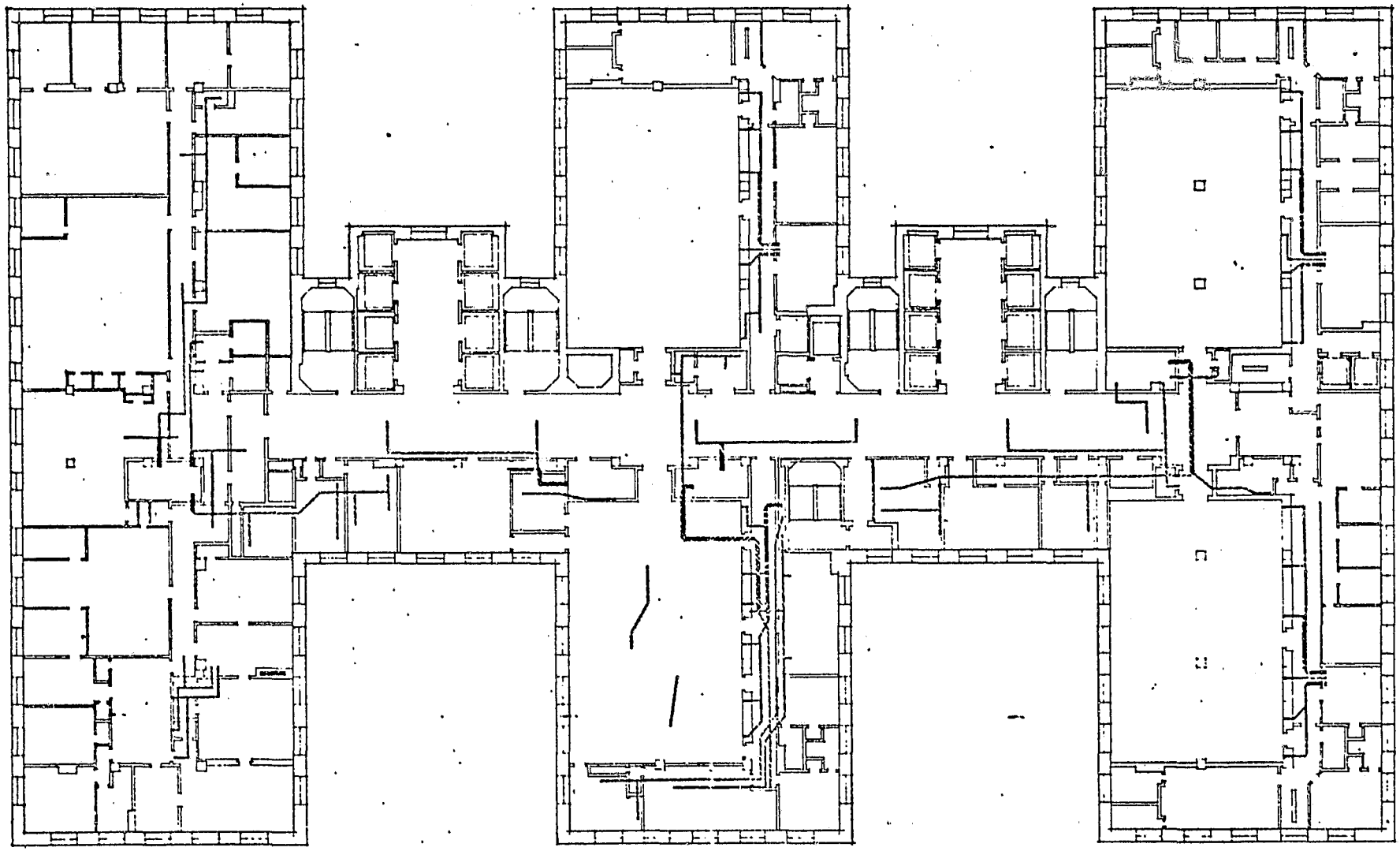
COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM 111 CENTRE ST. NEW YORK, N.Y. 10013	SCALE 0 5 15 25 50 FEET NORTH	MANHATTAN CRIMINAL COURT BUILDING 100 CENTRE ST. NEW YORK, N.Y. 10013 EXISTING H.V.A.C. SYSTEM	DWG. NO. HV-13	FLOOR 13



VENT RETURN — VENT SUPPLY — A/C SUPPLY — A/C RETURN

COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM 111 CENTRE ST. NEW YORK, N.Y. 10013	SCALE 0 5 15 25 50 FEET — NORTH	MANHATTAN CRIMINAL COURT BUILDING 100 CENTRE ST. NEW YORK, N.Y. 10013 EXISTING H.V.A.C. SYSTEM	DWG. NO.: HV-14	FLOOR 14

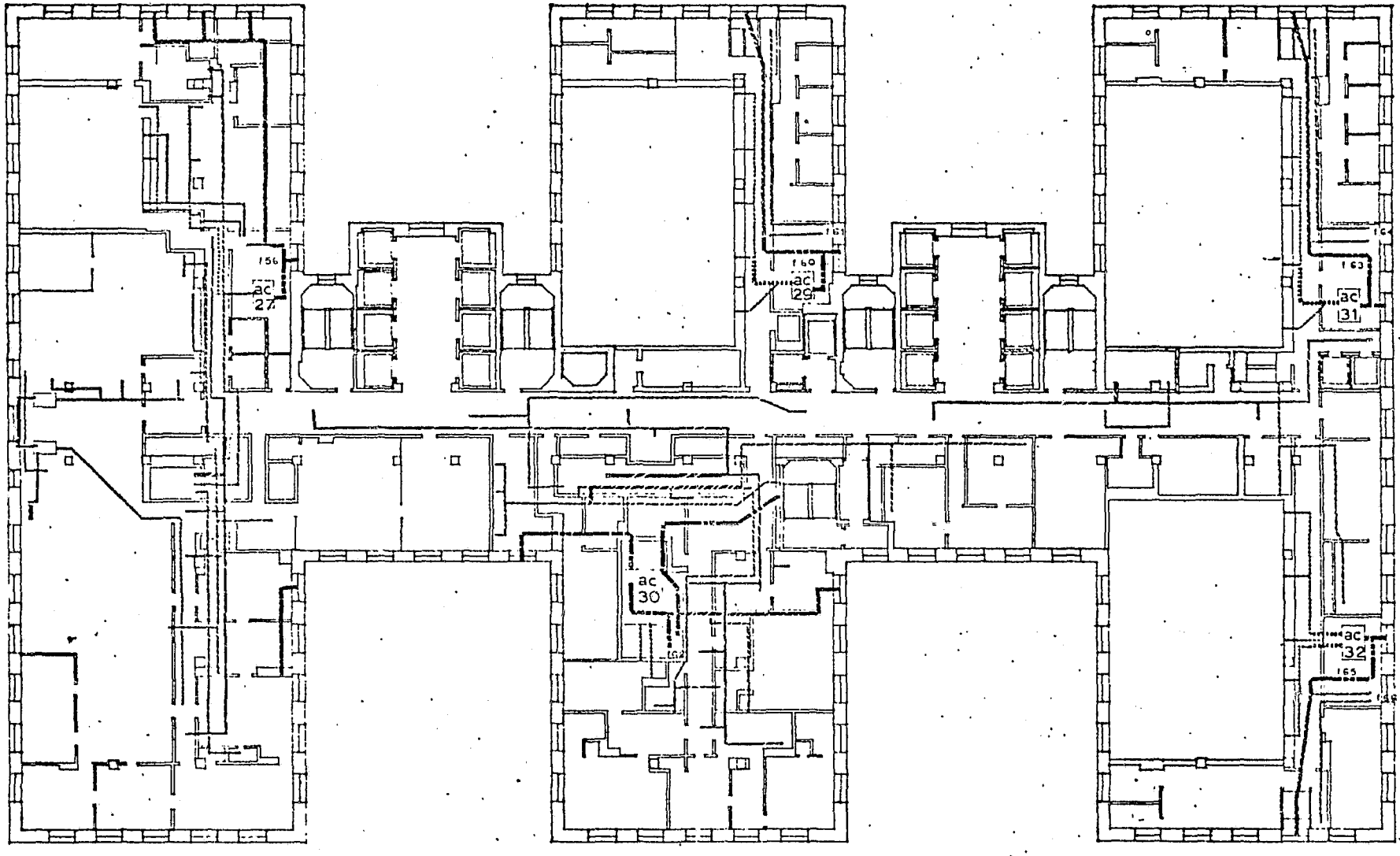
A-20



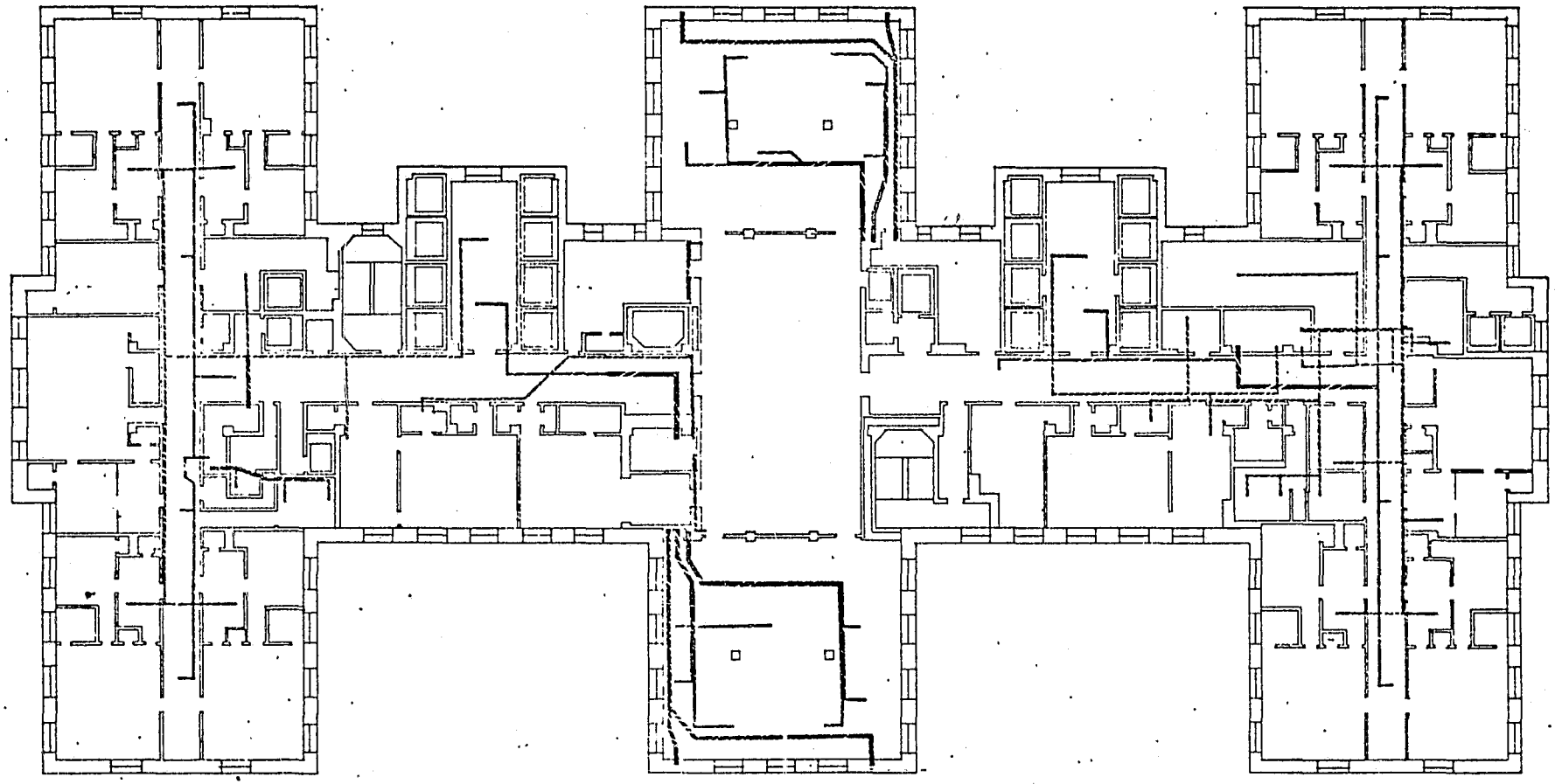
VENT RETURN — VENT SUPPLY — A/C SUPPLY — A/C RETURN

COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM 111 CENTRE ST. NEW YORK, N.Y. 10013	SCALE 0 5 15 25 50 FEET	NORTH	MANHATTAN CRIMINAL COURT BUILDING 100 CENTRE ST. NEW YORK, N.Y. 10013 EXISTING H.V.A.C. SYSTEM	DWG. NO. HV-15	FLOOR 15

A-21



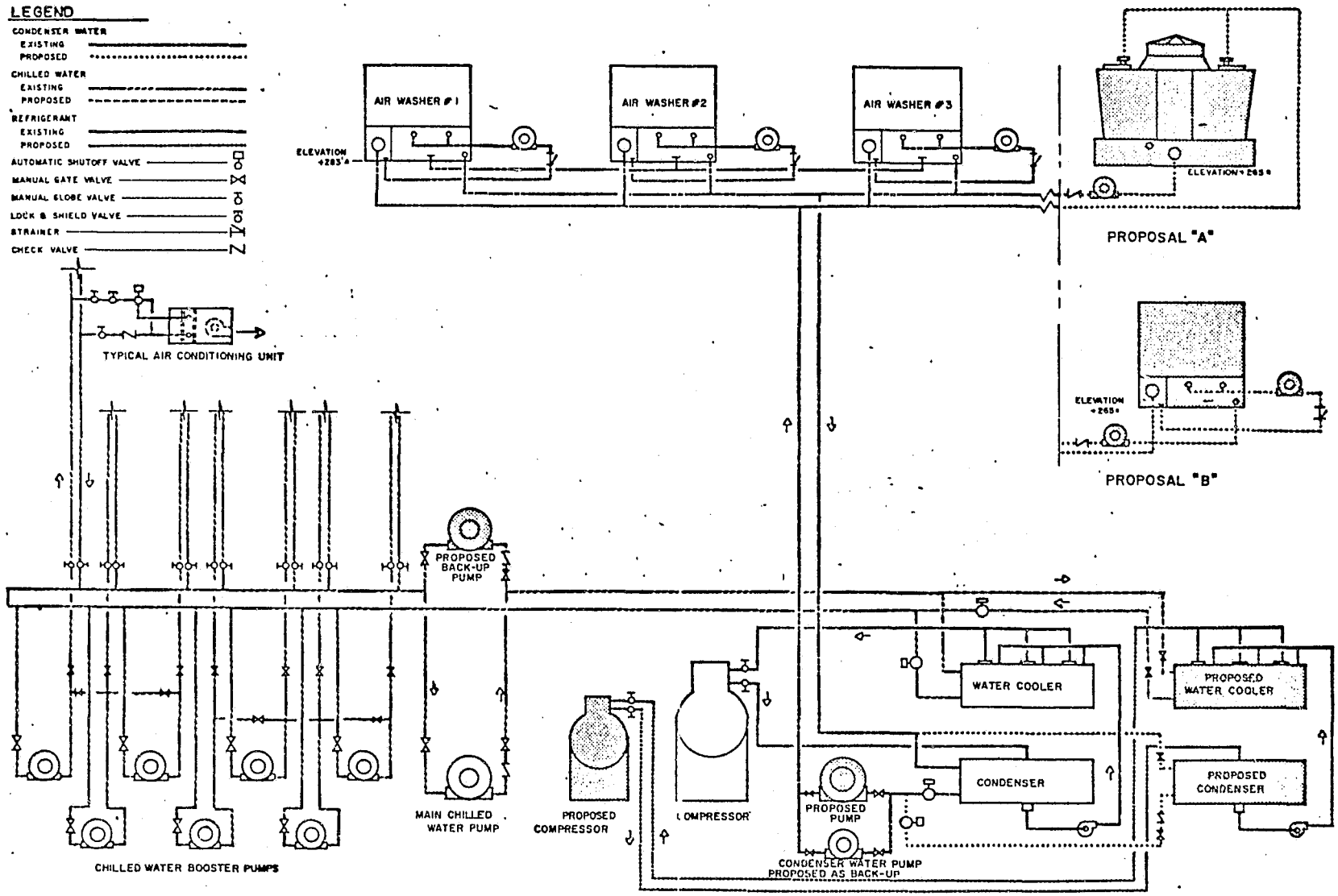
COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM 111 CENTRE ST. NEW YORK, N.Y. 10013	SCALE 0 5 15 25 50 FEET NORTH	MANHATTAN CRIMINAL COURT BUILDING 100 CENTRE ST. NEW YORK, N.Y. 10013 EXISTING H.V.A.C. SYSTEM	DWG. NO. HV-16	FLOOR 16



VENT RETURN — VENT SUPPLY — A/C SUPPLY — A/C RETURN

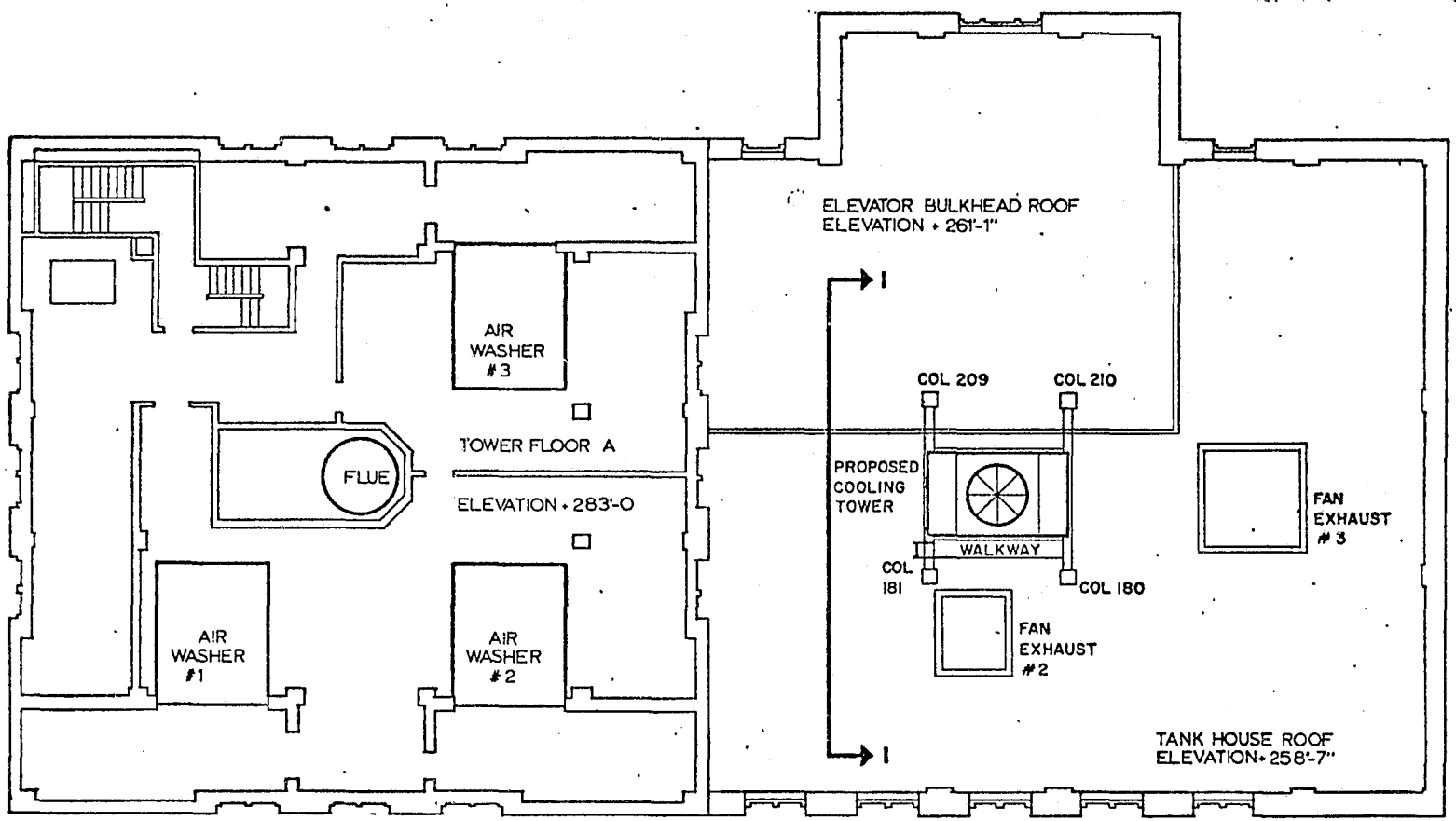
COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM 111 CENTRE ST. NEW YORK, N.Y. 10013	SCALE 0 5 15 25 50 FEET NORTH	MANHATTAN CRIMINAL COURT BUILDING 100 CENTRE ST. NEW YORK, N.Y. 10013 EXISTING H.V.A.C. SYSTEM	DWG. NO. HV-17	FLOOR 17

A-23



COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM 111 CENTRE ST. NEW YORK, N.Y. 10013		MANHATTAN CRIMINAL COURT BUILDING 100 CENTRE ST. NEW YORK, N.Y. 10013 AIR CONDITIONING SYSTEM	DWG. NO. AC–1

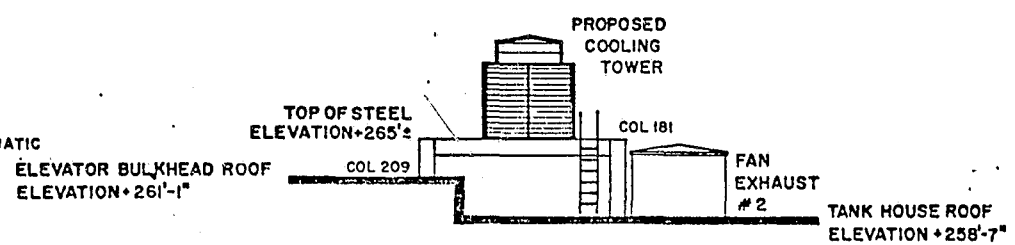
A-24



PLAN

GENERAL NOTES

1. PROPOSED COOLING TOWER, SEE PROPOSALS "A" & "B"
2. EXISTING AIR WASHERS #1, #2 & #3, SEE PROPOSAL "C"
3. ALL PIPING INDICATED ON AIR CONDITIONING PIPING SCHEMATIC



SECTION I-I

COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM
111 CENTRE ST. NEW YORK, N.Y. 10013

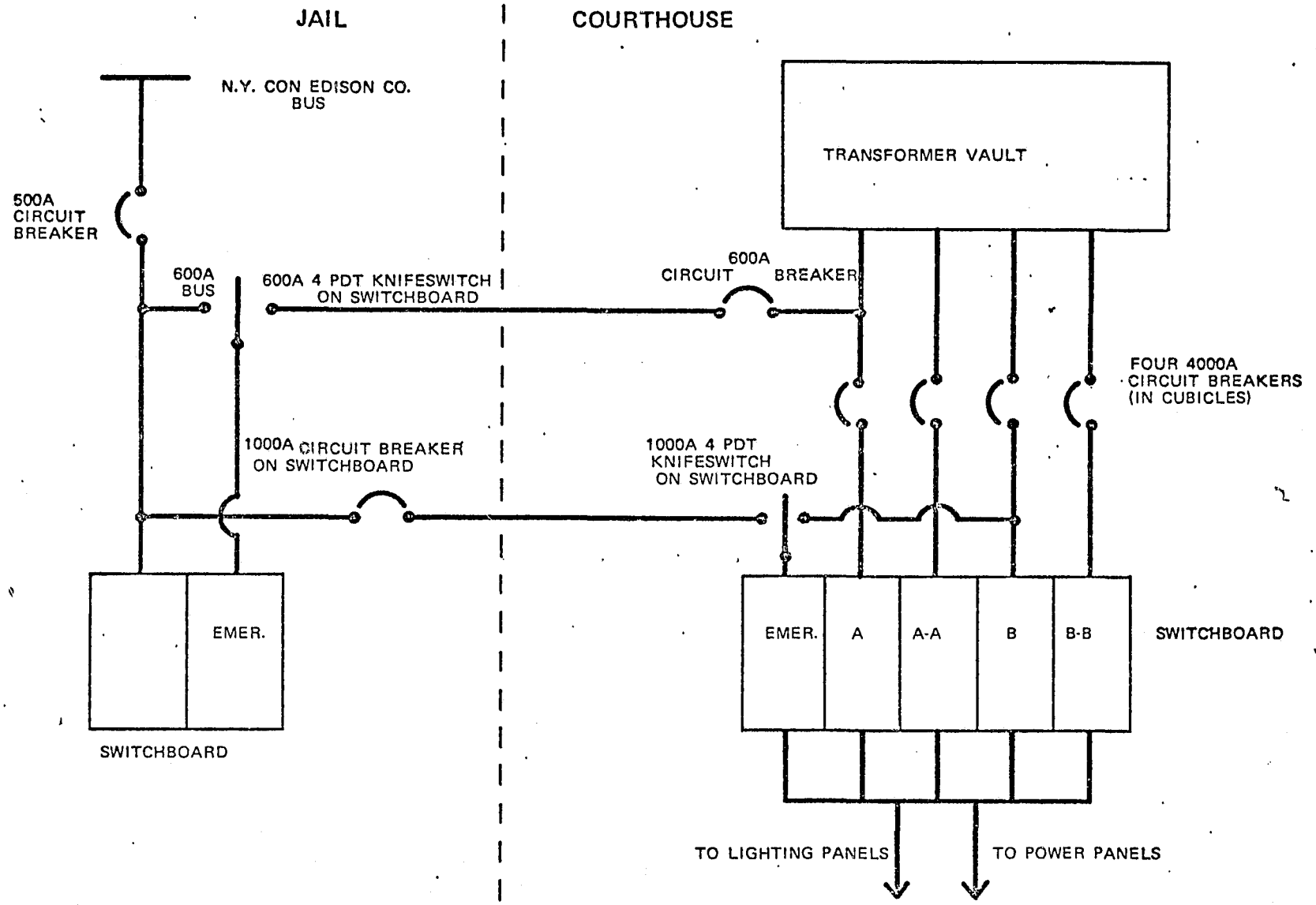
SCALE 0 5 15 25 50 FEET

NORTH

MANHATTAN CRIMINAL COURT BUILDING
100 CENTRE ST. NEW YORK, N.Y. 10013
PROPOSED COOLING TOWER

DWG. NO. AC-2

A-25



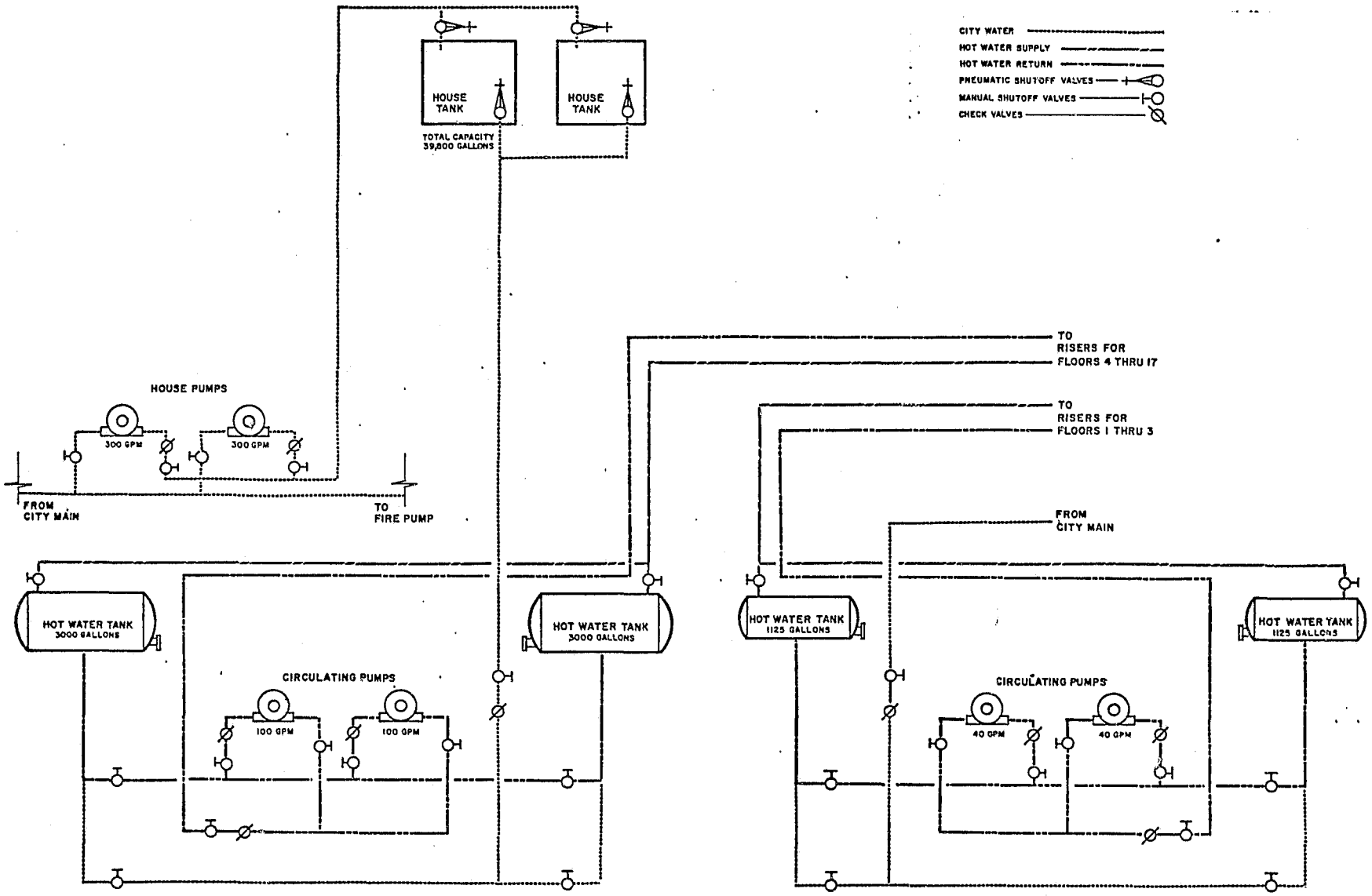
COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM 111 CENTRE ST. NEW YORK, N.Y. 10013		MANHATTAN CRIMINAL COURT BUILDING 100 CENTRE ST. NEW YORK, N.Y. 10013 EXISTING ELECTRICAL SYSTEM	DWG. NO. EL–1

Table EL-1
ELECTRICAL PANEL DIRECTORY
Manhattan Criminal Court Building

FLOOR	LOCATION	QUANTITY OF SPARE BREAKERS 115 VOLT AC LIGHTING PANEL	QUANTITY OF SPARE BREAKERS 208 VOLT AC AIR CONDITIONING PANEL		
			15 AMPS	20 AMPS	30 AMPS
1	North	5	2	4	4
	Center	10	2	4	4
	South	1	0	0	0
2	North	15		No Panel	
	Center	14		No Panel	
	South	3	0	0	0
3	North	2		No Panel	
	Center	14		No Panel	
	South	0	0	0	1
4	North	0		No Panel	
	Center	2		No Panel	
	South	2	2	4	4
5	North	4	0	2	4
	Center	4	8	9	0
	South	3	2	2	4
6	North	2	2	4	4
	Center	2	0	4	4
	South	2	2	4	4
7	North	3	2	4	4
	Center	4	2	3	4
	South	2	2	3	4
8	North	0	1	0	4
	Center	3	0	0	3
	South	1	0	2	2
9	North	4	2	4	4
	Center	4		No Panel	
	South	0	2	4	4
10	North	4	2	3	3
	Center	0	2	4	4
	South	5	2	4	4
11	North	11		No Panel	
	Center	11		No Panel	
	South	6	2	4	4

12	North	8			No Panel	
	Center	14			No Panel	
	South	6			No Panel	
13	North	6		2	4	4
	Center	3		2	4	4
	South	1		0	4	4
14	North	5		2	4	4
	Center	3		1	4	4
	South	0			No Panel	
15	North	0		0	0	0
	Center	12			No Panel	
	South	8			No Panel	
16	North	4		2	1	5
	Center	4		1	2	2
	South	3		0	3	2
17	North	1	(25 amps)	0	3	3
	Center	2		0	4	4
	South	1		2	4	4

* Unless otherwise noted, all breakers are rated at 15 amps.



COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM 111 CENTRE ST. NEW YORK, N.Y. 10013		MANHATTAN CRIMINAL COURT BUILDING 100 CENTRE ST. NEW YORK, N.Y. 10013 EXISTING PLUMBING SYSTEM	DWG. NO. PM–1

NAN S. SIH, CONSULTING ENGINEER

55 NORTHERN BLVD.,
GREENVALE, NEW YORK 11548
TELEPHONE (516) 621-4732, 2582

1 Barstow Rd.
Great Neck, N.Y. 11021

Nov. 9, 1970

Dr. Michael Wong, Director
Courthouse Reorganization & Renovation Program
Suite 922, 111 Centre St.
New York, N.Y. 10013

Dear Dr. Wong:

Enclosed please find the following;

1. Two prints of preliminary plan for the Criminal Court Building, which shows the proposed framing for the additional floors, probable bridge locations.

2. Four sheets of preliminary computation sheets.

3. A list of drawings I have received so far from your office.

Please mark up one print for any information shown that may not be the requirements of your office, and return to my office. In addition, I request the following informations be sent to me as soon as you can,

1. Fifth floor plan for the Criminal Court Building.

2. Foundation plans for the Criminal Court Building.

3. Structural plans for Courthouse Buildings 60, 80, and 100.

4. Informations required to determine the span and location for bgidges connecting the buildings.

5. Specify at what floor levels bridges are required for the Criminal Court Building, and at what floor level or levels are required for connecting the buildings.

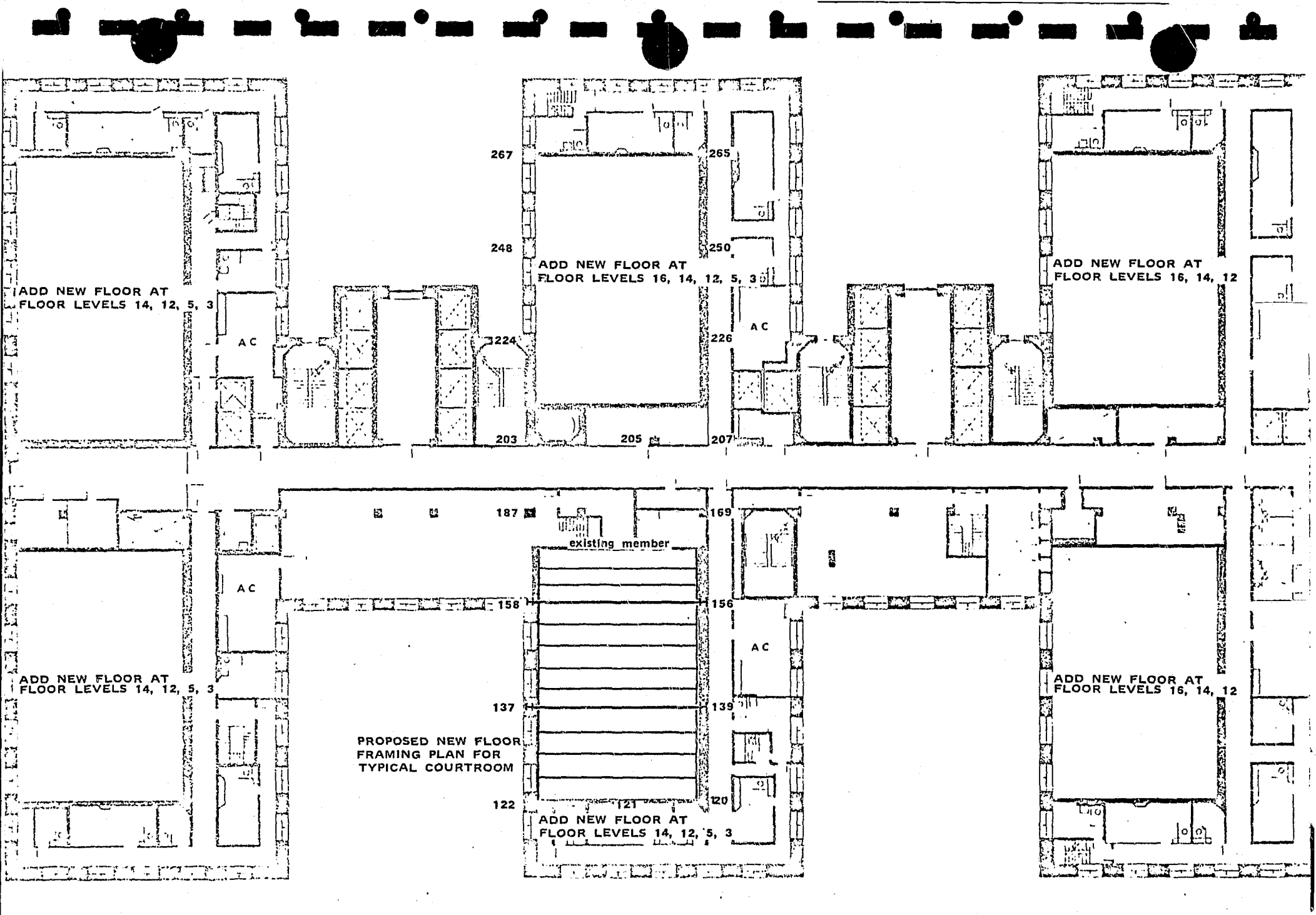
So far my initial findings indicate it is feasible to add these floors for the Criminal Court Building, however, this is not final since I have no informations on the bridges or the foundations.

Also please indicate a time schedule for the work, until additional informations are received, I am not proceed any further.

Yours very truly,

Nan S. Sih

Nan S. Sih



SCALE 10 0 20 40 FT.

MANHATTAN CRIMINAL COURT BUIDLING

TYPICAL FLOOR PLAN

A-31

BY N.S. DATE 10/70 SUBJECT Criminal Court Bldg.
CHKD. BY DATE JOB NO.
SHEET NO. 4 OF 4 A-32

Col. 224

Fl.no.	Section	Area	Load	$\frac{P}{A}$	add. floor load	add. col. load	Load tot.	$\frac{P}{A}$	incre.	% incre.	add. floor load	add. col. load	Load tot.	$\frac{P}{A}$	incre.	% incre.
16	14H342	100.6	1282	12.8	49	49	1331	13.3	.5	3.9						
14	14H384	112.9	1585	14.1	"	98	1683	14.9	.8	5.7						
12	14H320 2Rs 18×1	130.5	1858	14.2	"	147	2005	15.3	1.1	7.8						
5	14H426 2Rs 21×2¼	219.8	3195	14.6	"	196	3391	15.5	.9	6.2						
3	14H426 2Rs 22×2⅝	240.8	3463	14.4	"	245	3708	15.4	1	7						
Boiler room	14H426 2Rs 22×3¼	273.8	3953	14.5	---	294	4247	15.5	1	6.9						

Col. load area = 20·19 = 380 ft² DL = 30
LL = 19
49

Col. 224 o.k., also col. 220 by inspection — for adding floors at 16, 14, 12, 5 & 3.

Col. 267

Fl. no.	Section	Area	Load	$\frac{P}{A}$	add. floor load	add. col. load	Load tot.	$\frac{P}{A}$	incre.	% incre.	add. floor load	add. col. load	Load tot.	$\frac{P}{A}$	incre.	% incre.
16	14H78	22.9	184	8	31	31	215	9.4	1.4	17.5	—	—	—	—	—	—
14	14H111	32.7	397	12.2	"	62	459	14	1.8	14.8	31	31	428	13.1	.9	7.4
12	14H158	46.5	595	12.8	"	93	688	14.8	2	15.6	"	62	657	14.1	1.3	10.2
5	14H314	92.3	1280	13.9	"	124	1404	15.2	1.3	9.4	"	93	1373	14.9	1	7.2
3	14H370	108.8	1484	13.7	"	155	1639	15	1.3	9.5	"	124	1608	14.8	1.1	8.1
Boiler room	14H320 2RS18×1	130.5	1917	14.7	—	"	2072	15.9	1.2	8.2	—	"	2041	15.6	.9	6.1

Col. load area = $20 \cdot 12 = 240\ ft^2$ DL = 19
LL = 12
31^K

BY N.S. DATE 10/70 SUBJECT Criminal Court Bldg.
CHKD. BY DATE JOB NO.
SHEET NO. 3 OF 4 A-33

Col. 250

Fl.no.	Section	Area	Load	P/A	add. floor load	add. col. load	Load tot.	P/A	incre.	% incre.	add. floor load	add. col. load	Load tot.	P/A	incre.	% incre.
16	14H127	37.3	450	12.1	60	60	510	13.7	1.6	13.2						
14	14H202	59.4	736	12.4	"	120	856	14.4	2	16.1	60	60	796	13.4	1	8.1
12	14H255	75	1015	13.5	"	180	1195	16	2.5	18.6	"	120	1135	15.1	1.6	11.9
5	14H320 2Rs 18×1⅝	152.5	2160	14.2	"	240	2400	15.8	1.6	11.3	"	180	2340	15.3	1.1	7.8
3	14H426 2Rs 18×1¼	170.3	2398	14.1	"	300	2698	15.8	1.7	12.1	"	240	2638	15.5	1.4	9.9
Bol.Rm.	14H426 2Rs 20×⅞	200.3	2700	13.5	—	"	3000	15	1.5	11.1	"	"	2940	14.7	1.2	8.9

BY N.S. DATE 10/70 SUBJECT Criminal Court Bldg.
CHKD. BY DATE
SHEET NO. 2 OF 4
JOB NO.
A-34

BY N.S. DATE 10/70 SUBJECT Criminal Court Bldg. SHEET NO. 1 OF 4
CHKD. BY DATE Additional floor, court room area JOB NO. A-35
initial investigation, entire area covered

Col. 248

Fl. no.	Section	Area	Load	$\frac{P}{A}$	add. floor load	add. col. load	Load tot.	$\frac{P}{A}$	incre.	% incre.	add. floor load	add. col. load	Load tot.	$\frac{P}{A}$	incre.	% incre.
16	14H150	44.1	359	8.2	60	60	419	9.5	1.3	15	---	---				
14	14H158	46.5	631	13.6	"	120	751	16.2	2.6	19	60	60	691	14.8	1.2	8.8
12	14H219	64.4	872	13.5	"	180	1052	16.3	2.8	21	"	120	992	15.4	1.9	14
5	14H320 2Rs 18×1¼	139	2042	14.8	"	240	2282	16.4	1.6	11	"	180	2222	16	1.2	8.1
3	14H320 2Rs 18×1¾	157	2277	14.5	"	300	2577	16.4	1.9	13	"	240	2517	16	1.5	10.4
Boiler room	14H426 2Rs 18×1½	179.3	2678	15	---	"	2978	16.6	1.6	11	---	"	2918	16.3	1.3	8.7

assume DL = 80 #/ft² inc. 20 #/ft² allowance for partition
LL = 50 " for computing column load

Col. 248 load area ≐ 20·23 = 460 ft²

DL =	37^K	62%
LL =	23	38 "
	60	

Appendix B

MANPOWER PLANNING STUDY

Appendix B
MANPOWER PLANNING STUDY

General Statement

The primary goal of the manpower planning portion of the Courthouse Program in the initial phase of the study is the development of future manpower requirements for each operating unit utilizing space in the Criminal Courthouse Building at 100 Centre Street. The Study Team will endeavor to analyze these manpower requirements, on a "working unit" basis, for each operating unit of the Criminal and Supreme Courts of New York County and the various support agencies of these courts. Included in the analysis of each unit will be the development of future manpower requirements through the year 2000, in five-year intervals, developed and projected in light of the various legal and procedural changes likely to occur within the court structure during that time.

Following an initial period of general orientation to the court, the manpower studies were initiated with the various support agencies selected for initial analysis (Legal Aid, Probation, Corrections, etc.). In this way, a thorough knowledge of the roles of each party in the courtroom will have been gained prior to observation and analysis of court operations and the various units of the court structure itself. Below is a list showing the sequence for study of the various units of the Criminal and Supreme Courts of New York County.

The conduct of each of these manpower studies will consist of the following activities:

1. Reading and digesting all available material on the functions and activities of the unit and reviewing previous studies which may have been done on the unit.

2. Becoming familiar with the physical location and layout of the unit.

3. Obtaining the current budget documents when available and analyzing the staffing levels, classes, and mix.

4. Evaluating the utilization of present staff.

5. Interviewing at least one high level staff member and as many additional staff members of the unit as necessary to develop a closer insight into the unit's operations, and to clarify any points which were unclear from the written material previously studied.

6. Analyzing the historic growth, if any, of the unit during the past several years, and attempting to pinpoint the reasons for this growth, through interviews, and analysis of workload statistics and past position justifications.

7. Isolating the key factors which ultimately determine the required staff, in all employee classes, for the unit.

8. From an analysis of these factors (caseload, space, population, law enforcement, legal statutes, proximity of other units, backlog, administrative procedures, etc.) attempt to project future trends in unit activity, and consequent staffing changes.

9. Evaluate these projected requirements in light of each of the agreed upon assumptions (see separate list of assumptions) to determine the effect of each planned procedural, legal or administrative change on the manpower requirements for the particular unit.

10. Developing and handing out questionnaires, where deemed necessary, to clarify elements of workload which may be deemed pertinent to the analysis and are not available in any other form.

11. Development of any new recommendations where practical to increase the efficiency of the unit.

Court Study

Of paramount importance to the operation of the Criminal Court of

New York County are the many support agencies and units which play key roles in the judicial process. During the past two months the manpower planning study team, working with the staff of the Courthouse Reorganization and Renovation Program, conducted investigations into the activities of seven of these units: Office of Probation, Legal Aid Society, Department of Corrections, Society for Prevention of Cruelty to Children, Psychiatric Clinic, Manhattan Court Employment Project, and Court Police Unit. In each instance an analysis was made of the present manpower assigned, their workload, relationship to other units, and plans for the future. All available written material, including budgets and previous studies, if any, were gathered and digested. The historic growth of each unit was analyzed in an attempt to pinpoint the reasons for this growth, if any, through interviews with staff and analysis of workload statistics.

A meeting was held with the Hon. Leland Tolman, Director of Administration of the First Appellate Division and with the program director to clarify the overall assumptions to be used by the study team in framing future manpower projections. These assumptions involve prospective changes to Criminal and Supreme Court jurisdiction and operating approach which affect future personnel requirements.

Each of the assumptions discussed would conceivably have an effect on the future manpower requirements of the Criminal Court and/or Supreme Court of New York County.

1. Removal of traffic cases from Criminal Court jurisdiction - an accomplished fact.

2. Removal of housing violations from Criminal Court jurisdiction - Mr. Tolman foresees this occurring by 1973.

3. Removal of cases involving chronic alcoholism from Criminal Court jurisdiction - Mr. Tolman indicated that these cases might remain in the Criminal Court, or might be removed several years from now.

4. Removal of prostitution cases from Criminal Court jurisdiction - Mr. Tolman believes these cases probably will eventually be removed for disposition elsewhere, but probably even later than alcoholic cases. He indicated the possibility that prostitution cases might remain within the court jurisdiction, but with a new method of processing.

5. Narcotics Cases - Governor Rockefeller has been advocating a separate court to handle narcotics addiction cases. While Mr. Tolman believes there is merit in removing these cases from the Criminal Court jurisdiction, he is not completely sure of the merits of the Governor's proposal. These cases and any change in the handling of prostitution cases may be linked.

6. Time limits on case dispositions - Mr. Tolman feels the recent proposals for a 60-day limitation on disposition of misdemeanor cases is unrealistic. He foresees the possibility of a 90-day limit being imposed soon for misdemeanors in the Criminal Court. This time limit would run from arraignment through sentencing. Any time limit imposed on cases in the Supreme Court would probably be longer than 90 days.

7. The Butler Decision - this implies the right to jury trials for all misdemeanor cases. Mr. Tolman indicated the impact of this decision on court caseload is still unclear.

8. Eliminating three judge trials - this is foreseen as being accomplished by the end of 1971.

9. Eliminating the preliminary hearings in misdemeanor cases - Mr. Tolman indicated this will likely take place very shortly.

10. Master All-Purpose Parts - implementation on a test basis in the Criminal Court will begin January 1971. Full implementation will take two years at a minimum and possibly as long as five years in the Criminal Court. In the Supreme Court, institution of an All-Purpose Part will also begin in January, under the supervision of Mr. Gallagan to whom we have been referred. The All-Purpose Part

concept in the Supreme Court will be of a different form than that tested in the Criminal Court, and will apply to both civil and criminal cases tried there. At present, the Supreme Court judges are distributed six to civil cases and four to criminal cases.

11. Master Calendaring System - Mr. Tolman anticipates that this concept will be tested during the coming year but that its effects cannot be anticipated in advance. He is not aware of how this will be integrated with the MAP Program.

12. Reduction of Court Backlog - various proposals have been made for additional sessions, or space to attempt to reduce the court case backlog in the Criminal Court on a crash basis. Mr. Tolman believes there probably will be night sessions in New York and Bronx Counties within the next year. We were referred to Judge Ross for additional information on this matter. Mr. Tolman indicated that some reassignment of staff will be necessary but he is not sure whether any additional court personnel will be required for these night sessions.

13. Unified Civil/Criminal Court - Mr. Tolman indicated that some preliminary discussions have taken place regarding a completely unified court system eliminating the distinction between Criminal and Civil Courts. This would allow some justices now presiding in civil parts to be used in the more heavily congested criminal parts. Such a plan might be implemented with a constitutional amendment. Despite the advantage of additional manpower flexibility, it is not certain whether the expected opposition of the civil justices will be overcome.

The program director and the manpower planners also met with Harold Finlay, Director of an Economic Development Council task force, whose group is performing an in-depth management audit of activities within the Criminal Court. We have established liaison with this group and will be coordinating our efforts so that information is exchanged and duplication of effort is avoided.

Preliminary Guideline for Interviews

1. Identification of current staffing levels for all classes of employees.

2. Evolution of staffing levels from recent past to present, including yardsticks used.

3. Functions of each class.

4. Productivity and utilization of staff.

5. Identification of duties which could be performed by other classes.

6. Reporting relationships and span of control.

7. Factors upon which requests for additional manpower would be based.

8. Limiting factors on staff size:
   a. Financial
   b. Spatial
   c. Procedural
   d. Time
   e. Legal

9. Work Schedules

10. Anticipated effect of proposed legal and procedural changes in court administration on manpower requirements.
    a. All-Purpose Part concept
    b. Jury trials for misdemeanors
    c. Removal from Criminal Court system of:
       1) Traffic offenses
       2) Prostitution
       3) Drug Addiction
       4) Alcoholism
    d. Office of Administrative Case Control
    e. Computerization and automation.
    f. 1971 Criminal Procedures Act.

11. Advance forecast by unit of staff and other requirements, together with rationale for same.

12. Suggestions for improvement in utilization of staff.

13. Internal plans for procedural changes.

14. Projections on future caseload.

Sequence of Units to be Studied

1. Office of Probation (Criminal Court)
2. Legal Aid Society
3. Department of Correction
4. Society for Prevention of Cruelty to Children
5. Psychiatric Clinic (Mental Health Services)
6. Manhattan Municipal Court Employment Project (Vera Institute of Justice)
7. Police and Court Appearance Control
8. District Attorney
9. Criminal Division of the State Supreme Court
   a. Administrative Judge (3)
   b. Justices of the Supreme Court (61)
      1) Certificated Justices (7)
      2) Special Referees (5)
   c. General Clerk (25)
   d. 13 Criminal Trial Parts
   e. Part I, Special Term
   f. Part II, Special Term
   g. Part III, Special Term
   h. Probation Department (195)
   i. Special Services
      1) Law Department (42)
      2) Interpreters (6)
      3) Conciliation Bureau (7)
   j. Court Reporters (75)
   k. Library (11)
   l. Senior Court Officers (211)
   m. Law Stenographers (29)
   n. Nurse (1)
   o. Chief Clerk and Court Clerk Staff (51)

10. Criminal Court*

    a. Office of Administrator (3)

    b. Office of Assistant Administrator (Accounting and Supply) (19)

    c. Office of Assistant Administrator (Analysis and Statistics) (13)

    d. Court Reporter Bureau (89)

    e. Identification Bureau (13)

    f. Court Officer Assignment Bureau (12) (84) UCO

    g. Appeals Bureau (3)

    h. Legal (4)

    i. New York County Court Clerk's Office (56)

    j. Office of Administrative Judge (3)

    k. Office of Assistant Administrative Judge (2)

    l. Chief Clerk and Staff (2)

    m. Judicial Branch

        1) Assistant Chief Clerk and Staff

        2) Court Parts (98 Judges)

            Part 1A1
                 1A2
                 1B
                 1C
                 1D
                 2A, C, D
                 2B
                 3
                 6A, B
                 7A, B
                 1A.
                 1B2
                 2A3
                 2A4

*The Criminal Court will be studied after the Supreme Court to employ to the best advantage the data being compiled by the Economic Development Council's Task Force and to avoid as much duplication of effort as possible.

Approach Technique

1. Unit by Unit Familiarization
   a. Functions, Aims and Objectives
   b. Staffing Levels by Classes and Rationale
   c. Interviews
   d. Quantification of Activity by Job Title
   e. Other Studies Done on the Unit
2. Evaluation of Productivity of Current Staff Under Current Operations
   a. Time Studies Done by Staff
   b. Personal Interviews and Observations
   c. Caseload/Person/Class
3. Analyze Effect of Various Proposals Assumed for Future Implementation on the Staffing of Each Level
   a. Legal (Decisions) (Butler)
   b. Scheduling (O.A.C.C., Master Calendar)
   c. Procedural (Criminal Procedures Law, MAP)
   d. Statutory (Penal Code)
4. Analyze Expected Changes in the Factors Controlling Trends in Crime (Population Characteristics, Polic Force, etc.)

POLICE DEPARTMENT : EXISTING PERSONNEL DATA

ORGANIZATION UNITS / PERSONNEL TITLES	PHOTOGRAPHERS	SERGEANTS	COURT PROCESSORS	POLICE WOMEN	MESSENGERS	LIEUTENANT	POLICE OFFICERS	TOTAL
PHOTOGRAPHIC SECTION	14	3	*15	6	*12			50
COURT SUPERVISOR & SIGN-IN ROOM						1	14	15
COMPLAINT ROOM		4						4
APPEARANCE CONTROL							5	5
TOTALS	14	7	15	6	12	1	19	74

* Restricted duty police officers.

CORRECTIONS : EXISTING UNIFORMED PERSONNEL DATA

ORGANIZATION UNITS / PERSONNEL TITLES	DEPUTY WARDEN	CAPTAIN (MALE)	CAPTAIN (FEMALE)	CORRECTION OFFICER (MALE)	CORRECTION OFFICER (FEMALE)	TOTALS
SUPREME COURT		2		17	1	20
CRIMINAL COURT	*1	3	*1	53	12	70
BUREAU OF CRIMINAL INVESTIGATION				6		6
SUPREME & CRIMINAL COURTS CLINIC				3	1	4
TOTALS	1	5	1	[1]79	[1]14	100

* In charge of both Criminal and Supreme Courts.

1. Of these positions, 13 of the male C.O.'s and two of the female C.O.'s are weekend and holiday posts.

Staffing Rationale: Two Corrections Officers for each detention facility. One on the gate and one on the pen. The ratio of Captains to Correction Officers is supposed to be 1:17.

LEGAL AID SOCIETY : EXISTING PERSONNEL DATA

ORGANIZATION UNITS / PERSONNEL TITLES	SUPERVISORS (ATT'S.) (ATTORNEYS-IN-CHIEF)	ATTORNEYS	LAW ASSISTANTS	STENOGRAPHERS	TYPIST	CLERK-TYPIST	CALENDAR CLERK	MESSENGER	MAIL CLERK	CLERK	SWITCHBOARD OPERATOR	OFFICER MANAGER-RECEPTIONIST	SUPERVISOR (CLERK)	ADMINISTRATIVE CLERK	FILE CLERKS	LEGAL SERVICE ASSISTANT	ADMINISTRATIVE SECRETARY	TOTAL
PROFESSIONAL STAFF	2	47	19															68
SUPREME COURT UNIT (170, 171, 182)				2	2	2	2	2	1	7	1	1						
MENTAL HYGIENE UNIT				1	1					*3								*5
CRIMINAL COURT UNIT (1420B)										20			1	2	2	6		31
CRIMINAL COURT UNIT (1630)					2					1								3
SUPREME COURT UNIT (1620)																	1	1
TOTAL	2	47	19	3	5	2	2	2	1	*31	1	1	1	2	2	6	1	128

* One position currently vacant.

Caseload: Each attorney can carry approximately 250 cases/year under current operating procedures. This would also hold in the event the All-Purpose Parts* are implemented. Four lawyers would be assigned to each

PROBATION - MANHATTAN CRIMINAL INVESTIGATIONS : EXISTING PERSONNEL DATA

ORGANIZATION UNITS / PERSONNEL TITLES	OFFICE MANAGER	INTAKE CLERKS	PROBATION OFFICERS	SUPERVISOR (P.O.)	BRANCH CHIEF	SUPERVISOR (TYPING)	TYPIST	RECORDS CLERK	LIAISON OFFICERS	PARA-PROFESSIONALS	TOTAL
INTAKE UNIT	1	4									5
PROBATION INVESTIGATION UNITS *			29	6	1				4	1	40
TYPING POOL						1	8	1			10
TOTAL	1	4	29	6	1	1	8	1	4		56

* There are 6 units headed by a supervisor, 3 units have 5 Probation Officers and 3 units have 6 Probation Officers.

Caseload: Established by branch chief, 170 weighted cases/year, (1/3 for Youthful Offenders and 1 for an adult investigation.

SOCIETY FOR THE PREVENTION OF CRUELTY TO CHILDREN : EXISTING PERSONNEL DATA

ORGANIZATION UNIT / PERSONNEL TITLES	COURT REPRESENTATIVE	STENOGRAPHER	TOTAL
CRIMINAL COURT BRANCH	2	1	3

Caseload: Has averaged approximately 500 cases/year over the last 4 years. This caseload is apportioned evenly between the two court representatives.

PSYCHIATRIC CLINIC : EXISTING PERSONNEL DATA

ORGANIZATION UNITS / PERSONNEL TITLES	DIRECTOR	PSYCHIATRIST	PSYCHOLOGIST	SOCIAL WORKER	ADMINISTRATOR	TYPIST	CLERK	STENOGRAPHER	PRINCIPAL STENOGRAPHER	TOTAL
CRIMINAL COURT PROFESSIONAL UNIT	1	[1]8.5	3	1						13.5
CRIMINAL COURT CLERICAL UNIT					1	3*	1			5
SUPREME COURT PROFESSIONAL UNIT		3*	3*	1						7
SUPREME COURT CLERICAL UNIT							1	1*	1	3
TOTAL	1	11.5	6	2	1	3	2	1	1	28.5

* One position vacant.

1. This is in man years of a psychiatrist working full-time (20 hours weekly). Actually, the staff has part-time psychiatrists who work anywhere from 4 hours per week and up. They total 3,268 hours yearly.

Caseload: 7/67-6/68 - 601 competency cases; 7/68-6/69 - 837 competency cases; 7/69-6/70 - 1,085 competency cases. psychiatrist - 4 to 5 competency cases per week and 1 to 2 regular cases per week.

Caseload: Approximately 1,200 cases in 69-70.

MANHATTAN COURT EMPLOYMENT PROJECT : EXISTING PERSONNEL DATA

ORGANIZATION UNITS / PERSONNEL TITLES	BOROUGH DIRECTOR	ADMINISTRATIVE COORDINATOR	ADMINISTRATIVE ASSISTANT	PSYCHOLOGIST	SOCIAL SERVICE SUPERVISOR	SOCIAL SERVICE AID	RECEPTIONIST	STAFF SECRETARY	SUPERVISOR	SCREENER	ASSISTANT TO SUPERVISOR	REPRESENTATIVE	CAREER DEVELOPER	TOTAL
ADMINISTRATIVE	1	2	1	1	1	1	1	1						9
SCREENING									1	9				10
COUNSELING *									5		5	20	10	40
TOTAL	1	2	1	1	1	1	1	1	6	9	5	20	10	59

* There are 5 such units, each structured and staffed identically.

Caseload: Each representative can carry a caseload of 15-20 clients at a time. This caseload turns over 3 times a year (average time/client) = 17 weeks). Each counseling unit can therefore carry a caseload of about 200 cases/year. Consequently, the entire project has a capacity for 1,000 cases/year.

Appendix C

A COMPREHENSIVE & INTEGRATED INFORMATION COMMUNICATION SYSTEM FOR COURTS

Appendix C
A COMPREHENSIVE AND INTEGRATED INFORMATION COMMUNICATION SYSTEM FOR COURTS

INTEGRATED NETWORK OF DIRECTIONAL SIGNS

No court complex possesses a comprehensive and integrated information communication system. One of the tasks of the Courthouse Reorganization and Renovation Program is to develop such a system.

In most courthouses today, the only source of information available to the people entering the courthouses on court business is an information desk manned by a court officer with, at most, a calendar of cases being heard on that particular day. Most people wander from courtroom to courtroom trying to find out where their cases are being heard.

In Manhattan, there is not a single sign anywhere to direct the thousands of people travelling to the Foley Square Court complex located in the southern tip of the island. Most people reach the courts by means of the subway, buses or taxicabs. The most convenient subways are the IRT Lexington Line (local) on the east side and the BMT Brooklyn Line (express) from the west side. Both subways converge at Canal Street Station which is only two short city blocks from the Foley Square Court complex. The IRT Lexington line's next stop is Brooklyn Bridge Station which is also in close proximity to the court complex. The Independent 8th Avenue Line also has a Canal Street Station which is approximately six to seven blocks west of Centre Street. The 3rd Avenue bus stops at Bowery Street which is about four blocks east and the Broadway bus stops about four blocks west of Centre Street.

Some people drive to the Court Complex on the East Side Highway, the West Side Highway or along local streets. Unlike highways leading to airport terminals where large signs are displayed several miles from the airport, there is not a single sign on either highway to direct the cars heading for the court complex. Canal Street is one of the busiest streets in Manhattan, a noisy cross-town

thoroughfare receiving from and discharging traffic into the Brooklyn and Manhattan Bridges on the East Side, and the Holland Tunnel on the West Side. To add to the confusion, many streets are narrow one-way streets which create difficulties in maneuvering cars within the Foley Square area.

As part of the integrated information communication system, installation of a system of signs to help people travelling to the Foley Square Court complex is essential. In the subway system, signs and maps should be installed at Grand Central, Times Square, Canal Street, and Brooklyn Bridge Stations. The signs at Grand Central and Times Square stations should inform the public of the platform and the subway train that would take them to the court complex. The signs at the Canal Street and Brooklyn Bridge stations simply inform the public that they have arrived at the Foley Square Court Complex and show the direction they should walk to the Complex. A large scale map should be located outside of each of the two subway stations at Foley Square to show the location of the various court buildings and the type of courts. A sequence of street signs from the subway stations should guide the public to the main entrance of any of the courthouses.

On the East and West Side Highways, large signs similar in scale to the signs showing exit information, but containing the pertinent information on the approaching exits to the court complex, should be installed at least two miles before the exit is reached. When a motorist approaches an airport terminal, signs are available several miles before reaching the airport to inform him of the number of miles to the airport. In large airports, the various airline terminals are decentralized and a system of color-coded signs guide the motorist to the airline terminal of his choice. Similarly, once the motorist leaves the highways and drives on the local streets, there should also be adequate color-coded signs to direct him to the courthouse in which his case is to be heard. Such a system of signs will also assist taxicab drivers to locate the particular courthouse for his passenger.

CONTINUED

1 OF 3

In a later report, specific recommendations will be made for an integrated network of directional signs.

INFORMATION COMMUNICATION SYSTEM IN COURTHOUSE

In an airport terminal building, a passenger is directed to the appropriate gate by a series of signs displaying information regarding the flight number, destination, time of departure and gate number. Having arrived at the waiting and check-in area outside the gate, a close-circuit television set or other posting devices inform the passenger of the most up-to-date flight information. An efficient information communication system announces the boarding as well as flight information on posting devices, and the waiting passengers are directed through the gate directly to the plane. It is clear that an analogy exists between an information communication system for the airport and for the courts, the main differences being that, in most instances, there are fewer flights than cases within a period of time and therefore flight information can be accommodated within a relatively small posting space, and that passengers arrive at and depart from the airport at various times whereas, under the existing operation, people involved with the courts arrive at about the same time.

After arriving at the Criminal Court Building at 100 Centre Street, a person not familiar with the court system and facility layout would find it extremely difficult to orient himself and to locate the part of the courtroom where his presence is required. In the first place, there are two entrances of equal emphasis to the building from Centre Street. Each entrance leads to a bank of eight elevators. By using a system of signs, one entrance can be used by people involved in the Criminal Court and the other by people involved in the Supreme Court. In addition, the central information counter in the center of the enormous entrance lobby is frequently unattended and grossly inadequate as a source of information.

In the entrance lobby there should be a series of devices

posting information such as the name of the defendant, the type of court action, the Master All-Purpose unit to which the case is assigned, and the approximate time of hearing anticipated. The information shown is retrieved from the memory bank of a secondary computer which in turn draws case information from the master computer. Each Master All-Purpose Unit has an information board or closed circuit TV screen similar to those used in airport terminals to show the cases handled by the MAP unit. This part of the information communication system is closely phased with the Master All-Purpose unit operations which provide the updated case information to the posting devices through the computer. Consoles similar to those used at the ticketing counters in airline terminals can also be used at the information counters at the entrance lobby of the courthouse to retrieve information directly from the computer memory bank regarding the status of any case.

If necessary, and if the physical location of courtrooms in existing court buildings allows, each MAP unit should have a central waiting area from which cases and people can move to the Master Calendar Courtroom and then to the back-up all-purpose Part. This would be analagous to the information communication system adopted at the George Washington Bridge Bus Terminal at 178th Street. There each passenger loading and unloading platform on an upper level is shown on a closed circuit TV screen in the main concourse waiting area. The same concept can be applied to each courtroom. The Master Calendar Courtroom in each MAP unit would have a large information display board showing the cases to be heard and the ready cases during the morning and afternoon court sessions (if the court calendar could be split into morning and afternoon sessions) in the order that they are assigned to the back-up courtrooms. As each case is disposed of by the court, the information is automatically removed from the display board, so that there is a continuous updating of cases throughout the day. Some type of posting device, either a closed circuit TV screen or a three-line modular flap unit should be installed outside each back-up court-

room, to show the relevant information of the case being heard and that of the two ready cases to follow . The program team is carrying out time studies of each segment of a case being processed through the court, and information on the approximate times that the two subsequent cases will be heard can be incorporated into the information posted. For instance, if the type of hearing being handled by a particular court occupies fifteen minutes on the average (from time studies) and the case started at 10:00 a.m., the approximate time for the following case would be 10:15 a.m. If this second case is a trial which may take an average of 25 minutes to complete, the third case would have a scheduled approximate time of 10:40 a.m.

In the master calendar courtroom where adjournments are granted and dates for subsequent appearances determined by the judge, the clerk of the court should have a console which supplies, on demand, information on the various dates and approximate times available for the case to be heard in one of the back-up Parts. If possible, the console should automatically show on the screen the first available date and approximate time for that particular case, and when the judge makes the decision on the date and time for the case, a card containing the information is either printed automatically by the equipment or handwritten by the clerk so that the defendant could take it with him as a reminder of his next court appearance (if any). It is not envisaged that the back-up Part would require such a console and the rare request for an adjournment date can be made by the clerk from that part to the clerk in the Master Calendar Part by phone. The latter clerk would request the information and phone it back to the former clerk. An alternative approach would be for the judge in the back-up Part to return the case to the Master Calendar Part for rescheduling.

Detailed specifications of this system are contained in the second part of this Appendix.

SECURITY COMMUNICATION SYSTEMS

In the area of court security, it is technically possible for courtrooms to have the judicial area separated from the public area by means of a physical barrier such as a shatterproof one-way glass wall. The sound of the court proceedings would have to be piped from the judicial into the public area by means of a microphone-amplifier-loudspeaker system. The loudspeakers should be placed in locations that will not produce echoes or fluttering effects in the public area.

If a room separated from the courtroom is needed for detaining a disruptive defendant during trial, and if this were legally acceptable, the same microphone-amplifier-loudspeaker system plus a closed-circuit TV screen would be necessary to enable the defendant to see as well as to hear the entire court proceedings. In the courtroom, two cameras should be installed: a rotating camera which could span 180 degrees to cover the entire judicial area, and a fixed camera concentrating on the judge and witness. Both cameras should have zoom lenses for close-up views of court participants, and both cameras would transmit images to the TV screen in the detained defendant's room. The monitor room should be located outside the courtroom, separated by a glass wall so that court proceedings could be viewed by the operators in the monitor room. The sounds of court proceedings should also be piped into this and other rooms in which trial participants are kept for various reasons. A third camera covering private conferences between judges and attorneys during the trial should be located either in the judge's chambers or in the conference room where such conferences are conducted. These proceedings are not transmitted to the TV screen in the detention room, but are recorded on film as part of the court's records.

For the security of the court building, there are several areas which require the service of an efficient information communication system. In most new multi-story apartment buildings, a surveillance

system consisting of a camera located at each entrance to the building, with a central panel of several TV screens located at the front entrance of the building, one covering each entrance, so that any illegal entry into the building could be detected by the doorman at the front door and in a central location. In the Criminal Court Building, such a surveillance is very useful in detecting suspicious people entering the building and in locating a prisoner during an escape attempt. This system can be expanded to using a camera strategically located on each courtroom floor, with the central panel of TV screens centrally located in the court officers' security control room on the entrance level. Any unusual disturbances in the public spaces on each floor can thus be detected visually and audibly, and measures can be taken immediately to restore order and security.

Relating to this operation, an alarm system could be incorporated which would allow a judge or court clerk to press a button or to lift a foot lever at their station and notify the court officers in the central security control office by a light and buzzer system of an escape attempt or of a disruption in the courtroom.

CASE INFORMATION RETRIEVAL SYSTEM

In the retrieval of case information by judges, probation officers, district attorneys, legal aid attorneys and other court personnel during the preparation for a case, it is envisaged that small consoles be installed in chambers and offices to retrieve case information instantly. For instance, information relating to the status of the case, the time and place of its next court appearance, and the prior judicial actions taken could be retrieved on demand. These terminals can be very expensive and the cost of installing a terminal in each office or chamber would be prohibitive. The initial number of console terminals can be positioned centrally and shared by several people, or the people can telephone the operator who would request the information from the computer through the console.

It is possible to put legal research information into the computer so that private attorneys as well as court personnel can retrieve, by means of similar consoles, legal information pertinent to the cases being handled. While this system could be prohibitive in cost to many legal firms, it would substantially reduce the amount of time attorneys spent in certain types of research.

DRAFT SPECIFICATIONS OF THE INFORMATION COMMUNICATION SYSTEM FOR THE MANHATTAN CRIMINAL COURT

The ICS specified herein proposes to alleviate the delay time in the processing of cases in the Criminal Court. It is designed to provide a completely integrated information display facility. The system capability is sufficient to post and retrieve criminal court case information including defendant names, courtroom numbers, type of crime, scheduled time, and courtroom assignments. The heart of the system is an independent mini-computer which links to the main IBM 360-50 computer. The mini-computer has a 400-word memory bank, and a disc storage device of 65,000 characters. The ancillary equipment consists of a control unit, input devices, interfaces, a programmer, display boards, video monitors and display units.

Scope

These specifications and charts and all other written items relating to the ICS shall be considered part of the Contract Documents. In addition, the agreement between the successful Contractor and the Owners (Department of Public Works, City of New York), the accepted Bidder's proposal and all other approved addendums and substitutions, shall also be included as part of the Contract Document.

The contract covers not only the furnishing of all equipment specified herein but also includes the installation of all equipment, roughing work, and the preparation of the spaces in which the equipment is to be installed. The Contractor shall install all conduits, cabling, inter-connecting wiring, panels, circuit breakers, switches, including all other equipment furnished to this Contractor by others to make the system complete and workable to the satisfaction of the Architect.

The system shall completely meet with these specifications with regard to performance, functions, and operations. In addition, the system operation shall meet all required tests to the satisfaction of the Architect. There shall be a dry run of the completed

system. The Contractor for a period of no less than two months duration shall be obligated to acquaint and instruct the operational personnel in the Criminal Court Building with the operation and maintenance of each item of equipment in this system.

The warranty period shall be for one year's duration starting from the time the Architect approves the system in writing. There shall be at least twelve instructional manuals which describe the operations of the system in detail. These manuals are also to be delivered to the Architect prior to his final approval.

The extent of the ICS shall be confined to be within the physical confines of the Criminal Court Building.

Operations

a. Existing

Court appearance calendars are displayed throughout the building in a random fashion, confusing persons unfamiliar with the court. A person who does not know the Part in which he has to appear has to go through as many as twelve different calendar Parts to locate his case.

Cases are called in twelve different calendar parts and their readiness to proceed is ascertained haphazardly. Participants, including the police officers, do not make appearances in the proper courts on time.

Conscious dilatory tactics of attorneys for various reasons are apparent in their efforts to delay the movement of cases. The participants' inability to appear as scheduled must be remedied. An analysis of the calendar calls of Part 2A2 and 2A3 reveal that 65 percent of all calendar cases required a second call and 13 percent a third call.* The calendaring judge has no way of determining when the participants are ready to proceed.

---

*This information is contained in a report by Lacy, James L. and Gray, Peter R., Proposal for a Master Calendar Project in the Manhattan Criminal Court of the City of New York, Vera Institute of Justice, Criminal Justice Coordinating Council, June 19, 1970.

b. Proposed Master All-Purpose Concept

Several plans have been advanced as suggested solutions to the congestion problem of court cases. The MAP concept has been chosen on a short interval test basis. Initially one MAP unit with a calendaring and four all-purpose courtrooms will be structured. If this plan proves successful in reducing delays and confusion existing in the present processing of Criminal Court cases, substantial implementation of the MAP concept would be undertaken for the entire criminal court structure. The essential features of the MAP concept would consist of the following:

1. Reduce case appearances.
2. Efficient scheduling of cases.
3. Calendar of ready cases in each back-up Part to start off each morning.
4. Greater velocity of case flow from the Master Calendar Part to the four Satellite Back-Up Parts.
5. Control of cases from Master Calendar Part to Satellite Back-Up Parts for substantive actions.

As noted before, the proposed ICS is designed with great adaptability and flexibility features. Whether the application is to be made for the present Criminal Court system or for the new MAP system, the ICS will still function efficiently. However, the greater usage of its full features would apply to the MAP complex.

The ICS will be used to assist in alleviating the present congestion existing in the public corridors of the Criminal Court Building.

At the time of arraignment, the typical case is assigned by the judge to the MAP master calendar unit. The clerk prepares a notice card for the defendant and for each participant of the case. The card contains information including the defendant's name, charge, place and date of required appearance and docket number.

On the return date all participants arriving at the courthouse are directed to and checked in at the waiting room adjoining the master calendar Part. At the check-in desk, a clerk notes the

presence of all participants on a master list of the day's cases. When all of the participants of a case have arrived in the waiting room, the case is posted on the ICS board and sent to the MAP calendar Part.

Police officers scheduled to appear at the MAP Parts have already been alerted and are waiting at a separate police sign-in and waiting room.

The Appearance Control Unit of the Police Department will supervise the movement of police officers to and from each case. Conflict of appearances at different courtrooms will be avoided.

The MAP clerk immediately notifies the police officer, the D.A., legal aid, probation officers that all outside participants have arrived and that the case is being sent into the MAP calendar Part.

C.R. Television or monitors, which display the status of cases, will be located in each department's central office. They are tied directly into the Master Computer Information system. All conflicts in schedules are to be reported immediately to the check-in clerks via the CRT system.

If the case moves from the MAP calendar Part to one of the four back-up Parts, the clerk in the calendar Part inputs the status of the case into the ICS. In the back-up Part, the adjudication on adjournment decision is recorded by the court clerk and can also be fed into the ICS. Depending upon the decision of the judge in either the calendar or the back-up Part, the case cards carried by the defendant and other participants are marked with new information relating to the date and place of their next appearance, and the change in criminal charge, fines, parole, bail, etc.

Cases requiring more than one post-arraignment appearance generally return to the same MAP back-up Part on the adjourned date before the same judge and with the same legal aid attorney until the case is ready to proceed for definite substantive resolution, however, the present plan is to have the case appear only before the master calendar judge.

The proposed ICS may also be adapted for use in the Supreme Court.

Detailed Specifications

These specifications indicate the performance requirements of the ICS for use in the Criminal Court Building in Manhattan.

1. Intent

These specifications define the system objectives with regard to performance, functions, capabilities, operations and inter-faces with other systems and units. The Bidder will be restricted in his choice of equipment to national brands in accordance with the list of approved manufacturers. If the bidder wishes to offer the equipment of a national manufacturer not on the list part of his bid, it is mandatory that a complete listing of the equipment he proposes to substitute for those in these specifications be submitted to the Architect for his written approval.

2. General Description

The ICS shall be designed and installed to provide a complete information communication display facility for court participants in criminal court proceedings, including courtroom assignments, case names, types of criminal charges, and approximate time of the scheduled cases. The system shall provide automatic programming of displays, accepting manual as well as automatic programmed entry to accomplish changes in and/or additions to the displayed information. Furthermore, the system shall have the capability of entering into the existing data base of the IBM 360 Computer through interfacing and other equipment required for such entry and recall. The computer location shall be considered remote.

3. System Criteria

The ICS shall be the most advanced, flexible and expandible information communication system of the bidder, and shall consist of an initial phase of construction expandable in stages up to the maximum capability of the system.

a. Initial Phase

The initial major equipment required is listed on Equipment

Schedule. This listing represents only major functional equipment and does not constitute a complete bill of materials, panels, relays, switches, etc. The contractor shall be responsible for providing and installing all additional equipment and materials required to make the complete system operational. The actual physical configuration of the system components and additional and/or substitutes equipment required for the system shall be defined and listed in the technical proposal of the bidder.

A program of alteration and modernization is currently under way. The ICS system will be installed concurrently with the new construction work. Drawing SK-1, depicts the projected ICS system configuration.

b. Equipment Locations and Configurations

The locations of the major equipment items shall be indicated on shop drawings and shall be submitted for the Architect's approval. Specific configurations and mounting arrangements shall be as specific hereinafter and shall be approved by the Architect before each item of equipment is shipped to the project site.

c. Expandibility

It is expected that the present alteration and modernization work will continue to 1980 and even beyond. This will require that the ICS as installed under the initial phase contract be designed to permit modification and/or additions of future equipment with a minimum interruption to an initial active system.

Guidelines relative to minimum expandability are set forth in subsequent sections. However, unforeseen requirements may require expansion beyond the minimum specifics. The bidder shall indicate any areas in which expandibility is limited and the limits thereto.

d. System Requirements

The ICS shall consist of a central programming major subsystem, video display subsystem and a display board subsystem. The quantity and locations of substation equipment and the performance capability of the central processing unit shall be furnished and

installed in accordance with these specification drawings,and the equipment schedules which are considered to be part of the contract documents for the ICS facility.

The ICS facility shall be capable of integrated operation of the display board and video display subsystems and be controlled by the central programmer. The system shall be capable of integrating the operations of the display boards and the videosets for simultaneous display automatically. All subsystems ahall have built-in adequate input devices to permit future additions of compatible equipment to increase the basic ICS facility to its maximum capability as specified hereinafter.

4. Performance Criteria

a. Operational Modes

The basic mode of operation of the system shall be automatic whereby display boards and video displays are controlled in accordance with a pre-prepared program. The program shall provide automatic roll-up and insertion of new court data at pre-determined times, and shall have minimum storage capacity adequate to store for court display information required during a two-week period.

The system shall have capabilities for temporary modification or correction of the automatic program by means of the central key board or by remote inputs. The location of these remote inputs shall shall be indicated by room number and department on an equipment location diagram. Typical program modifications will include roll-down of displayed data in order to insert new case data, changes in appearance times and back-up Parts and insertion of other changes of temporary nature relative to the cases displayed.

b. Permanent Program

The permanent program input may be generated selectively either from the main computer data base or from the digital computer of the central processing unit, and stored in the disc storage unit capable of storing up to 32K. The program shall contain all of the court schedule information relative to case calendar for the day.

The data shall appear chronologically, and shall indicate case designations, part numbers or rooms to which the case is assigned, docket numbers and any other pertinent data.

It is desirable that the maximum case period covered by the program, as constrained by the storage capacity, be of such duration as to minimize the number of required pre-prepared programs. This would require that the program period be referenced to the scheduled cases with the longest duration of time. The estimated minimum program period would be about one month, although longer periods may prove desirable as constrained by considerations of economy and operational simplicity. The actual number of cases processed through the Criminal Court system in 1969 was 2,183,437 (violations - 2,067,479; misdemeanors - 91,796; felonies - 23,162).

c. Program Modifications

Provisions shall be made in the programmer (see 5a for description) to permit both permanent and temporary modification of the program. Permanent modification shall include scheduled changes of unpredictable duration such as date changes due to new adjournments granted by the courts. No one except the defendant's attorney appears to know that a request for adjournment is going to be made. It is desirable that the initial preparation and permanent modifications of the permanent program be accomplished by means of the central control unit.

Temporary changes shall be carried out by means of a temporary data storage medium, which would accept scheduled data from the permanent program, and data relative to changes, additions or deletions from the central keyboard or remote input displays.

d. Program Addressing

It is desirable that the addressing of the programmer for changes be by case name and docket number, with court part designation by an abbreviation: MAP1. Addressing by display line number is not feasible due to the requirements for remote updating and to the entry of changes prior to actual displays, of the particular

case information involved.

e. Automatic Roll-up

The programmer shall provide automated roll-up of the case pending and ready information on the display boards and video displays. Provisions shall be made for entry of data relative to the actual arrival of the participants of each particular case to the programmer. The appropriate signs "READY" and the Part location and room number or "PART NUMBER" shall be displayed. Following a predetermined time interval relative to the case status data, the court action or the disposition of each case shall be indicated. The programmer shall then initiate the automated roll-up by removing the case from the display.

Following removal of the disposed case data, remaining case load information shall be rolled up on a line-by-line basis so that current information is not interrupted. Upon completion of the roll-up, new schedule data shall be inserted on the bottom line. When case information is divided into two equal information boards or columns, data shall roll-up on the information column and transfer to the bottom line of the other column. New schedule data shall then be inserted on the bottom line of the first information column.

Automatic roll-up of the displayed information shall be initiated by manual command. Following roll-up, the next line of schedule information shall be automatically read into the channels memory from the permanent program. Manual entry of changes or schedule updating shall be provided without affecting the remainder of the display.

5. Equipment Specifications

a. Programmer

The programmer or the mini-computer shall be a digital control unit capable of providing central control, data acquisition and distribution functions for the ICS facility. The control shall be on a real time performance basis. The unit shall include permanent and temporary data storage media of 400 word memory bank, and disc storage capacity of 65,000 characters and logic circuits which will

be required to accomplish the control, arithmetic and input-output functions. The memories shall be protected from primary power loss.

Inputs to the programmer shall be from the central control unit, and from remote keyboards, computers and other devices employed for program updating. The programmer shall provide outputs to the display boards, character generators, video display units, and the central control unit. Outputs to all displays shall be control and data signals as required by the type of display equipment. Outputs to the character generator shall be serial, ASCII coded data and central signals at the rate required by the character generator. Outputs to the control unit shall consist of feedback data and control signals as required for operation and display monitoring and supervision.

Modular construction shall be deployed wherever possible, using integrated circuitry and solid state devices exclusively. High quality parts and materials shall be selected and assembled to meet the specified performance and reliability requirements. Provisions shall be made for expandability as to number of outputs, inputs and program volume. The minimum expandibility capabilities in these areas shall be 200 percent.

b. Display Boards

The automatic program shall control the information displayed on the display boards. The display of information shall be initiated by the entry to the programmer of the case data, provided that space is available on the board at that time. Otherwise, the information shall be automatically displayed upon removal of the case from the particular board by the roll-up method described previously. All boards shall be single-faced unless otherwise noted on an Equipment Schedule.

The display boards shall be programmable, with graphic displays capable of operating in the modes described above. Several basic types shall be supplied as standard equipment. The boards may be flap-type, dot-matrix or other electro-mechanical types. Incandescent lamp matrices shall not be utilized. Sketches depicting

representative permanent legend and information line configurations are indicated on Drawing SK-1.

Modular constructions shall be utilized to the maximum practical extent. The information display may consist of all alpha-numeric modular or - as in the case of flap-type displays - of alphanumeric, numeric and word modular. Access for all maintenance and module replacement shall be in front of the board.

Lightweight, corrosion resistant materials shall be employed to the maximu m practicable extent in the frame and in the display modules. Corrosion - protective finishes for metal, hermetic sealing, and conformal coating shall be used to protect against dust, grease and humidity, and damp-atmosphere environment characteristic of the location of equipment, parts and materials shall be of select high quality contents for maximum performance requirements.

The size and weight of each display board shall be the minimum consistency with the information, character, size, number of characters and number of lines specified for particular board. The bidder shall indicate overall dimensions, weight and mounting requirements for each type of board in his technical proposal. The bidder is reminded to reference location drawings for known dimension constraints while preparing the technical proposal along with his bid.

The alphanumeric display module shall be combination single character units providing a minimum of 39 characters and one blank position. The characters shall include the alphabet, numerals 0 through 9 and two blank positions. Word modular shall be 40-position module of a length adequate for the display of the specific information, and shall provide at least one blank position.

Permanent legends including board identification and column headings shall be provided on each display board. Character sizes shall be consistant with the legend functions and with considerations of maximum legibility and overall aesthetics, as approved by the Architect. Board identification legend shall employ the largest characters practicable or constructively are worst-case ratio. (ratio of legibility) of the number of characters in a heading to a number

of characters in an information line under the particular heading. It is desired that the board identification legend be a minimum of ten inches and column heading a minimum of five inches.

Futura condensed characters shall be used for column headings. Board identification characters shall be similar to Futura Demi-Bold Graphic type style of characters 1 ¼ inches high, and shall be presented to and approved by the Architect in writing before fabrication.

Each display board shall have a capacity of twenty lines for case listing, with a permanent legend as follows:

MAP 1

DOCKET NO.	DEFENDANT	PART NO.	STATUS OR CRIME
6 spaces	18 spaces	4 spaces	10 spaces

The makeup of each information line shall include appropriate spaces and punctuation:

DOCKET NO.	ALPHANUMERIC FLAP-TYPE	6 CHARACTERS 6 ALPHANUMERIC MODULES
DEFENDANT	ALPHANUMERIC FLAP-TYPE	18 CHARACTERS 18 ALPHANUMERIC MODULES
PART NO.	ALPHANUMERIC FLAP-TYPE	4 CHARACTERS 1 NUMERIC MODULE
STATUS OR CRIME	ALPHANUMERIC FLAP-TYPE	10 CHARACTERS 1 WORD MODULE

Display boards shall be furnished and installed in waiting rooms and other spaces indicated on the Equipment Schedule.

c. Electronic Character Generators

The electronic character generator shall perform the digital-to-video conversion functions for the video subsystems. The display unit initially shall provide three data channels. The character generators shall accept serial, ASCII coded data and control input at the levels and rates characteristic of the various input devices. The character generators shall accept inputs from the Central control unit and from remote devices specified.

Each channel shall have adequate storage capability for the digital input data. The memories shall be protected from primary power loss. Logic circuits shall be built-in to convert stored data to video signals, to provide video synchronization generation, multiplexing and control functions. The video spectral limits shall be adequate to insure sharp definition and more contrast of the displayed characters. The units shall provide for automatic roll-up insertion of new data and changes as specified heretofore.

Each channel shall provide a compositevideo output at Electronic Institute Association (EIA) standard timing suitable for driving standard video displays and monitors. Synchronization shall be negative. The refresh rate shall be 60 Hz. The output level shall be 1.5 to 3.0 volts peak-to-peak into the 75 ohm coaxial cable. Line-driving and distribution amplifiers shall be provided to accommodate the number of displays, and the long coaxial cable runs required by the system. Display formats shall be designed as specified herein before.

The construction shall be of modular construction. All circuits shall be integrated, employing solid-state devices. Each character generator shall have a built-in feature for easy expansion of a minimum of six additional channels. Means shall also be provided for the addition of output amplifiers capable of driving an additional load of displays and coaxial equivalent to 100 percent of the loss specified herein.

d. Central Control Unit

The central control unit shall provide for manual control of the system. The unit shall include keyboard, print-out devices, controls, circuits, and devices as may be required for operation of those systems.

The control unit shall accept manual inputs by means of the keyboard and operational controls, and additionally shall accept electrical inputs from the programmer for the feedback of data and and control signals. The keyboard shall have full alphanumeric,

punctuation and special symbolic characters in standard typewriter format. Data feedback from the programmer shall be serial ASCII coded data at the optimum rate required by the printer.

Data entered by means of the keyboard and data fed back from the programmer shall be printed out. Display revisions entered by the control operator shall be displayed upon the command of the operator following a check of the printed information. Changes entered from remote sources to the programmer shall also be printed out and shall not be displayed until the operator so commands. A control shall be provided to override this function and permit direct display of the remotely-generated changes.

The control unit shall print-out periodically, under control of the programmer or upon demand by the operator, the complete information showing on the displayed boards. Provisions shall also be made for call-up of information and for changes thereto prior to actual display, as constrained by the programmer memory capacity. A check of information being displayed on the individual boards shall also be available to the operator. Control of all boards shall be from the central control unit, either directly or through the programmer.

The preparation or modification of permanent programs shall be accomplished by the central control unit. Input outlets for devices such as tape punches and tape readers shall be built into the control unit. The control unit shall have visual outputs from printers and shall provide serial ASCII coded data and control signals to the programmer.

The construction of the central control unit shall be modular to provide maximum flexibility in operation and ease of maintenance. Mechanical configuration, location, types, quantity of controls and indicators and the labeling of all controls and displays shall be of quality construction and materials consistent with the performance and reliability modes.

e. Video Control Units

Each video control unit shall include a keyboard, video monitor, punched tape readers and inch controls and indicators as will be required for control of three channels of the video display subsystem.

Each control unit section shall accept manual inputs by means of the keyboard and operational controls.

The keyboard shall provide full alphanumeric punctuation and special symbolic characters in standard typewriter format. Tabulator controls shall also be provided.

Each video control unit shall provide semi-automatic and manual controls of video subsystem as specified herein before. Control shall be provided for selection of channels, lines, columns and spaces, and for insertion and removal of displayed information. A cursor shall be provided for flashing of selected lines, words or characters. The video monitors characteristic shall be as specified herein before.

Each control unit shall provide visual outputs by means of the video monitor. Electrical outputs shall also be provided to the selecter channel in the character generator. These outputs shall be serial ASCII coded data at the levels and rates characteristic of the keyboard and tape readers.

The video control units shall be so designed and constructed as to provide maximum flexibility in operations and ease of maintenance. Each control unit shall be designed and constructed for easy expansion to accommodate three additional channels. Integrated circuits employing solid state devices shall be utilized throughout, with the exemptions of cathode ray tubes and high voltage rectifier. All materials and workmanship shall be of highest quality consistent with the performance and reliability requirements specified herein.

f. Video Displays

Video displays shall be standard, monochromatic cathode ray tube displays. The display size shall be 23 inches nominal

diagonal measurement. Characters shall be displayed white against a black background. The displays shall accept composite video signals at EIA standard timing and at the levels supplied by the electronic character generator.

The input sensitivity shall be adequate to insure normal operation under all worst-case conditions and combinations thereof, including minimum output levels from the character generator and maximum attenuation introduced by the video distribution subsystems and loading thereof.

Each display shall provide high-impedence bridging of the input line by a 75 ohms ±1 percent resistor. Input impedance selections shall be by a switch. The bridge impedance shall be designed to insure the elimination of reflection on the input line or undue loading of the character generator are incurred when the maximum complement of displays is connected to the line. The display shall permit selection of the differential or single-ended input configurations. With differential input the common-mode rejection at 60Hz. shall be a minimum of 40 db. Paralleled coaxial connectors shall be provided to permit loop-through operation.

The display shall provide a minimum video response of 10 MHz, flat to within ±1 db. Differential gain shall be less than 5 percent at the normal kinescope drive level. D.C. restoration shall be provided. Horizontal and vertical linearity shall be within 2 percent of the picture height.

Voltage regulations shall be used in the high and low voltage supplies. Regulation shall be sufficient to insure no objectionable display variations due to fluctuations of the AC power line voltages.

Controls and adjustments requiring frequent operations or adjustments shall be accessible from the front of the display. These controls shall be recessed and provided with flush hinged covers with locks.

The displays shall be designed to provide maximum legibility in areas of high ambient lighting. Etched, laminated safety shields

shall be bonded to the picture tube in order to minimize reflection and glare when subjected to ambient levels of 100 foot candles. All locations of displays are to be approved by the architects in writing. There shall be a minimum of 16 lines provided in each video unit. Character heights and the number of characters per line shall be optimums commensurate with maximum legibility.

Column headings and line make-ups for the video displays shall provide formats simultaneously with the board displays with the optimal feature of the utilization of abbreviations which may be employed to display the complete board information on the video display. The bidder shall indicate in his technical proposal the method that is to be employed to accomplish such abbreviations.

Solid state construction shall be employed exclusively with the exception of the cathode ray tube and the high voltage rectifier. parts and materials used shall be of highest quality to provide component parts and an integrated system which shall provide high performance and consistent reliability. In addition, lightweight corrosion-resistant materials shall be utilized to the maximum possible in cabinets, chassis, panels and covers. Corrosion-protective finishes for metal, hermetic sealing and conformal coating shall be employed throughout the fabrication and formulation of the video units.

g. Video Monitors

The video monitors shall be standard, monochromatic cathode-ray tube monitors. The display sizes shall be 18 inches in nominal diagonal measurement, and shall provide optimum legibility for their particular application. Input and operational characteristics and construction requirements shall be as specified for the video displays specifications. The monitors shall be installed as to operate in parallel with their respective video displays and board displays.

The information channels displayed by each monitor shall be selected and shall be identical to that of the respective video displays with the exception of the cursor employed for operational control of the channels.

h. Video Distribution

A video distribution subsystem shall be supplied with each video display system for transmission of the video signals generated by the character generator to the various video displays and monitors. The distribution subsystem shall employ 75 ohm coaxial cable and connectors, fittings and other devices as may be required to complete the installations. Attenuation, phase and flatness characteristics over the frequency range of interest shall be such as to introduce no objectionable distortion of the video signals.

Coaxial connectors shall be provided in the immediate vicinity of the displays. Connections to the displays shall be by jumper cables. Connectors shall be mounted in standard wall recepticle boxes as required by the electrical code (NY City) and shall be fully recessed. In all wet areas or when outlets are located in floor;waterproof boxes shall be used with screw on covers.

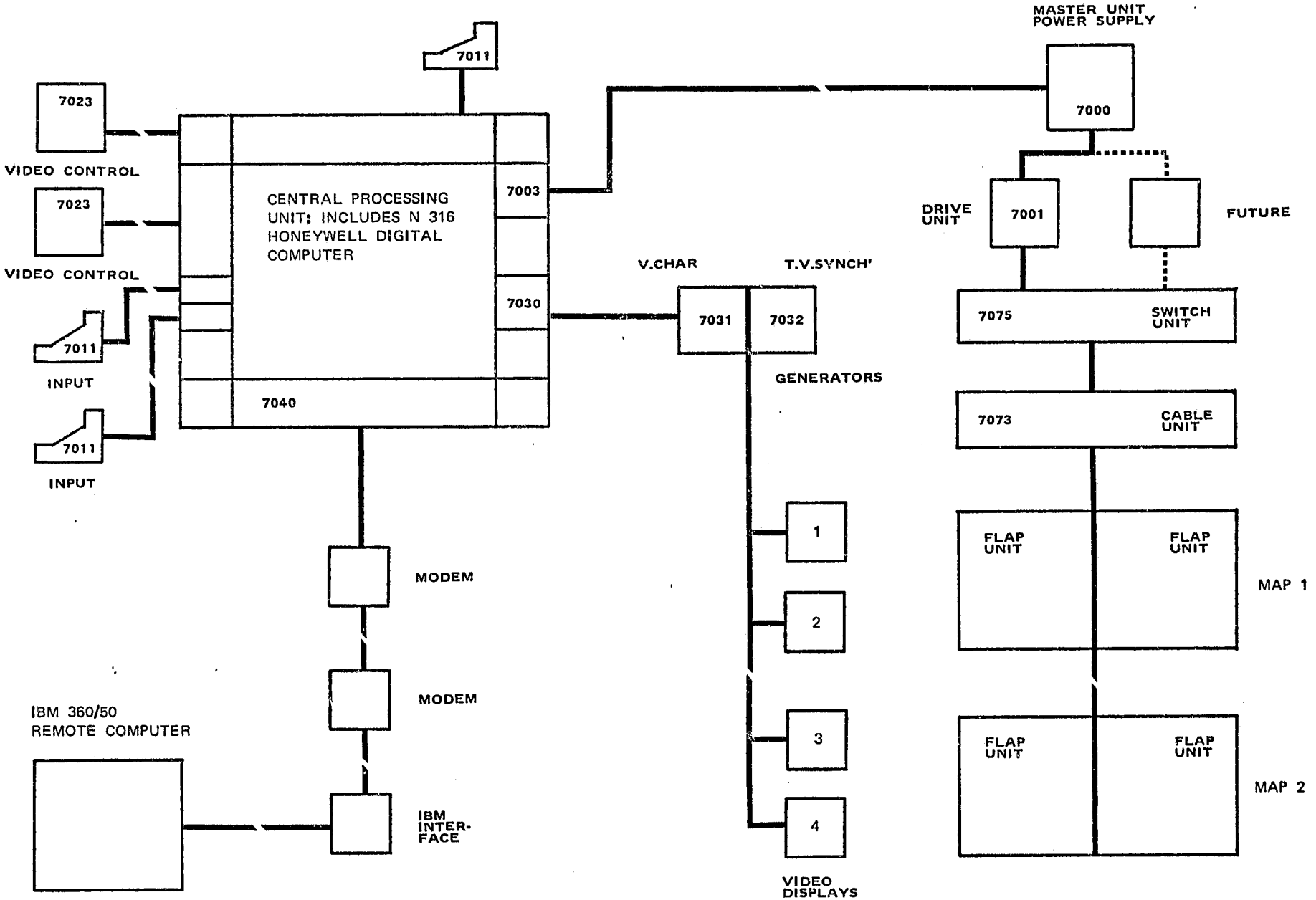
The design of the subsystem shall be integrated with the video subsystem as to make the entire system compatible and interfaced. Electromagnetic interferences shall be filtered out. The bidder shall indicate the methodology of providing the integrated system free of interference in his initial proposal and bid.

i. Intercabling

The bidder shall additionally depict on drawings and schedules the intercabling that is submitted with his bid as to the wiring requirements from the existing power supply sources (adequate to meet his power needs) to each piece of his equipment requiring electric power.

EQUIPMENT SCHEDULE

Quantity	Equipment	Location
One	Central Control Unit (Solari 80/70 or equal)	Equipment Room
One	Programmer or Mini-Computer (Honeywell H31G)	Equipment Room
Two	Display Boards, 60 inch x 60 inch each	MAP 1
Two	Display Boards, 60 inch x 60 inch each	MAP 2
One	Video Character Generator (Solari Model #7031 or equal)	Equipment Room
One	TV Synchronizing Generator (Solari Model #7032 or equal)	Equipment Room
One	Master Power Supply Unit	Equipment Room
One	Switching Unit	Equipment Room
One	Cabling Unit	Equipment Room
Four	Video Display Units	Four Remote Locations
Two	Video Control Units with Keyboards	One - Control Room One - Chief Clerk
One	Modem	Equipment Room
One	Modem	IBM Computer Room
One	IBM Interface Unit	IBM Computer Room
Three	Operators Input Units	One - Equipment Room Two - Control Room



COURTHOUSE REORGANIZATION AND RENOVATION PROGRAM 111 CENTRE ST. NEW YORK, N.Y. 10013		MANHATTAN CRIMINAL COURT BUILDING 100 CENTRE ST. NEW YORK, N.Y. 10013 INFORMATION COMMUNICATION SYSTEM	DWG. NO. SK–1

Appendix D

STATEMENT ON MAJOR CAUSES OF DELAYS

Appendix D
STATEMENT ON MAJOR CAUSES OF DELAY

While the detailed operational time study aimed at pinpointing delays has not yet been completed, several major delays in the criminal justice system in New York City have become apparent.

Delays in the Pre-Arraignment Procedure

Persons arrested in Manhattan are brought to the Criminal Court Building for preliminary hearing or arraignment after being booked at the precinct. There is usually a two to five hour wait for the messenger to return from the Police Headquarters with the yellow "rap" sheet which contains the record of previous offenses of the arrested person. Until this information has been received, the arrested person is simply detained in the temporary detention facility and the arresting officer waits along the corridor, reading a newspaper or looking bored. The number of arrested persons requiring temporary detention at any one time can become unmanageable. It is only after receiving the "rap" sheet that the prisoner can be photographed and the arresting officer can proceed with the complaint and docketing procedure.

One way to alleviate delay in the criminal justice system is to decentralize pre-arraignment into two to four units located strategically outside the courthouse (Figure D-1). Each pre-arraignment unit would be staffed with booking personnel, detention personnel, fingerprinting personnel, an assistant district attorney, a legal aid attorney, probation R.O.R. investigators and administrative and clerical personnel. The major task would be to complete pre-arraignment operations before transferring prisoners to the courthouse for the preliminary hearing or arraignment. Based on manpower resources, the following operations would be staffed: booking, fingerprinting, transmitting of fingerprints to NYSIIS in Albany, photographing, temporary detention, probation R.O.R. interview, discussion between

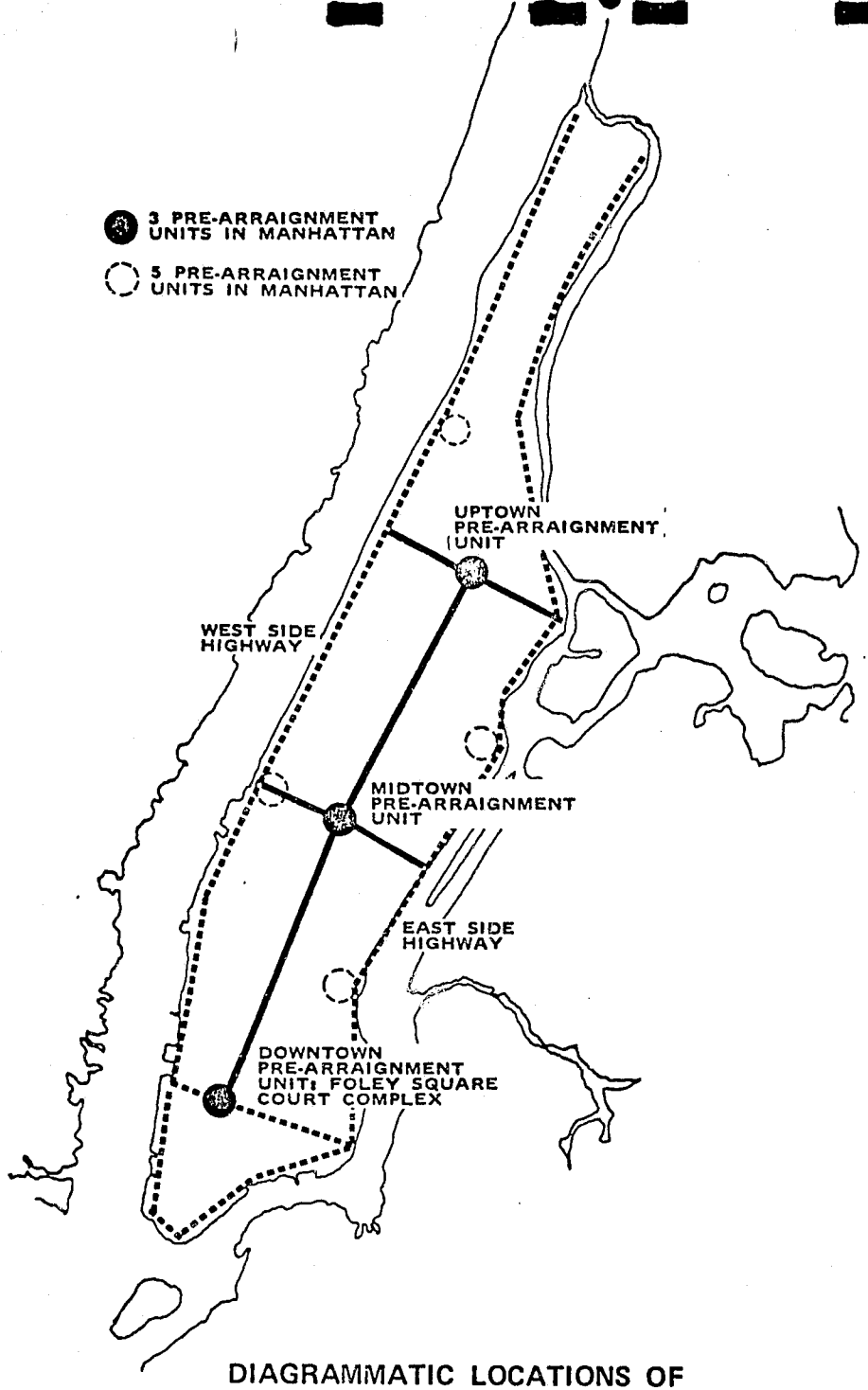
arresting police officers, complainant and legal aid prior to the preparation of the complaint, and detention of arrested persons (Figure D-2).

If these operations were performed outside of the courthouse in pre-arraignment units, the congestion of the present police, correction, complaint and docket spaces would be significantly reduced. The persons arrested would be kept at the unit until the complaints were prepared. They would then be transferred to the courthouse where each case would be assigned a docket number, followed by the arraignment or preliminary hearing. If adopted, this procedure would drastically reduce the waiting time of prisoners before arraignment.

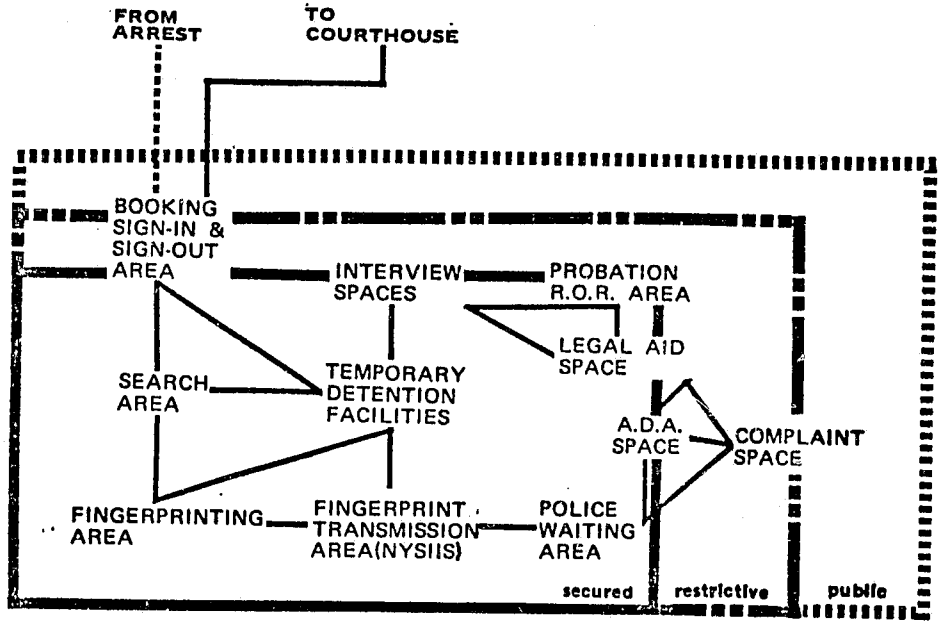
To eliminate the waiting time of arresting officers their cases should be transferred to liaison officers at the pre-arraignment unit so that the arresting officers could return to their duties after the preparation of the complaint. The liaison officers would present their cases at the arraignment or preliminary hearing. It has also been established that only on rare occasions does the judge question the arresting officer at arraignment. The Appearance Control unit has a record of all officers' phone numbers and addresses so that if, for some reason, an arresting officer is required to appear in the courtroom, he could be contacted immediately by telephone and be in the courtroom at short notice. Even if the decentralized pre-arraignment concept is not accepted, liaison officers should be used under the existing operation to relieve the arresting officers of long waiting periods.

Delays Resulting from Excessive and Unnecessary Court Appearances

Under present operation, witnesses, complainants, and arresting officers waste a great deal of time appearing at the courthouse at a return date when the cases should be ready, but are not. Causes of delay are many, including: delay tactics of attorneys, confusing



DIAGRAMMATIC LOCATIONS OF PRE-ARRAIGNMENT UNITS



SPATIAL RELATIONSHIPS OF PRE-ARRAIGNMENT UNIT

system of case assignment, excessive number of cases handled by each attorney, and unforeseen circumstances affecting the procedure of cases. The Appearance Control Project sponsored by the Vera Institute of Criminal Justice is devising means of controlling the number of unnecessary appearances of witnesses and arresting officers. By organizing the time and place that each witness and arresting officer could be reached by phone, a telephone alert system insures the arrival of witnesses and police officers at the courthouse approximately an hour after notification. Unnecessary appearances are therefore kept to a minimum. Tighter control over granting adjournments and over the number of cases to be handled by any attorney at any one time would also contribute towards minimizing delays.

Delays Caused by Jury Trials for Misdemeanor Cases

Regardless of the legal justification of recent legislation granting defendants in misdemeanor cases the right to a jury trial in lieu of a three-judge trial, the burden imposed on existing court facilities in accommodating this drastic change is a reality. In terms of spatial requirements, the change does not merely mean the addition of seven chairs (six jurors and one alternate) in each courtroom. It means that each jury courtroom will have to be large enough to accommodate a panel of potential jurors, that each courtroom will require an adjoining jury deliberation room or a room with private secured access from the jury box in the courtroom, that a secured space should be provided for holding the alternate juror during jury deliberation, that the jury assembly and selection facilities should be increased significantly to accommodate the sudden increase in the number of potential jurors summoned, that ancillary facilities to jury assembly and selection facilities will have to be provided to improve the environmental conditions of jury spaces, and that private and secured means of access will have to be devised to

transfer jurors as privately and as securely as possible to and from the jury assembly and selection spaces.

In the planning analysis of spatial utilization for the Criminal Court Building, a sufficient degree of flexibility has been injected into the space planning concept to allow adequate space for future conversion into jury spaces and for future expansion of jury assembly and selection spaces. A preliminary study of the predicted ratio between jury and non-jury cases is being made; the result will determine the proportion of jury to non-jury courtrooms and influence their location within the building. For the MAP operation which consists of four back-up Parts besides the calendaring Part, three of the four back-up Parts will have jury facilities. It is anticipated that more than half of the misdemeanor cases in which the defendants plead not guilty will become jury cases.

Delays in Bringing Detained Defendants to Trial Due to Excessive Backlog and Inefficient Operations

As a result of the recent prison riots in New York City, recommendations were made to facilitate 'speedy' trials. It was found that some defendants were detained for more than two years awaiting trial. To bring detained defendants to trial within 60 or 90 days of arraignment requires additional judges, courtrooms and ancillary facilities. Departments not significantly related to the disposition of cases or not requiring direct access to detained defendants will be relocated to 346 Broadway. The vacated spaces will then become available to accomodate departments or functions directly related to the disposition of cases.

Experimentation with the All-Purpose Part (APP), Master All-Purpose Parts (MAP), and the Office of Administrative Case Control (OACC) is being conducted in the various criminal courts in New York City. The basic aim of these systems is to improve the assign-

ment and adjudication of cases so that inefficiency in operation and in time utilization can be minimized. The OACC concept advocates the central control of case assignment and adjournments so that ready cases are fed to many Back-Up Parts. A special OACC courtroom would be used to handle motions and other actions requiring brief judicial determination. The MAP concept subdivides a large number of court Parts into satellite groups of five or six courtrooms; one of these is the Master Calendar Courtroom from which ready cases are assigned to available all purpose Parts. The APP concept being tested in the Criminal Court Building in Queens retains a case in one Part so that every stage of each case is handled by the same judge and the same team of court-supported personnel such as the assistant district attorney and the legal aid attorney. One principle common to all three systems is the continuity of representation of the defendant.

Preliminary study of the three systems indicates that the OACC is similar in operation to the MAP system, but somewhat less structured, and is most suitable for a court with a small number of court Parts. In large Metropolitan Courts at the Criminal Court level involving a quick turnover of cases (misdemeanor hearings and trials), the MAP System is preferable because the large number of court Parts are subdivided into several MAP units, each with a Master Calendar Court to assign ready cases to a limited number of Back-Up All Purpose Parts. The ratio of Master Calendar Courtroom to back-up parts depends upon the types of cases handled and the efficient operation of the Master Calendar Courtroom in the assignment of cases over the entire working day. Since most misdemeanor matters subsequent to arraignment could be consolidated into one or at most two hearings per case, the continuity of defendant representative can be easily maintained by a systematic calendaring of cases.

For large courts handling felony cases subsequent to arraignment, (the Criminal Division of the Supreme Court in New York City),

where each case may require several hearings and may involve a lengthy trial, the All-Purpose Part (APP) concept seems to be most appropriate. Each case would be assigned to a court Part which would then be fully responsible for the case until its disposition. For this operation, each Part may retain its clerical function unless all the relevant information can be directly and easily stored and retrieved from a central location either manually or by means of a central data processing system.

The combination of improved operation and adequate personnel and space could prove to be one of the most effective tools in solving some of the immediate as well as long-term problems of the Criminal Justice System in New York City.

Appendix E

STATEMENT ON SPACE SAVINGS BY MICROFILMING

Appendix E
STATEMENT ON SPACE SAVINGS BY MICROFILMING

The system value of reducing the size of documents on microfilm is that they can be easily handled by relatively inexpensive equipment and stored where they are needed. Reducing the size of documents permits the economical design of a central records library containing millions of documents. Such a library would provide considerable savings in employee search time for information. Another important reason for having a central microfilm library is for vital record protection and file integrity. Documents in microfilm are not borrowed and left unreturned. Also, because microfilm can be copied inexpensively, it is feasible to store a duplicate set of documents in a remote safe location.

Space Saving Standards

A standard 24:1 reduction ratio can produce more than a 95 percent space saving. Even greater savings can be realized by using higher reduction ratios. At a ratio of 150:1, 3,200 documents (8 1/2 inch x 11 inch) can be contained on a 4 inch x 6 inch microfilm card. The standard space of a file drawer stores approximately 3,000 (8 1/2 inch x 11 inch) documents filmed at 24:1 reduction rate. This can be photographed on one 100 foot roll of 16 mm microfilm. A role of Datapak 215 feet would hold twice as much. Microfilm cabinets are 52 inches high, 24 inches wide and 29 inches deep. There are two drawers and the total capacity is approximately 1,350 - 16 mm rolls of film. This means that a microfilm cabinet can accommodate films containing 4,050,000 pieces of 8 1/2 inch x 11 inch documents, or double that if Datapaks are used.

The record storage cabinets presently occupying over 15,000 sq. ft. of prime space on the ninth and tenth floors of the Criminal Court Building can be microfilmed and easily accommodated in three microfilm cabinets, which occupy less than 1 percent of the total storage area. It has been estimated that the process of

microfilming such old, folded documents dating back to 1774 would require two men working full time for approximately nine months. Copies could then be made from the original microfilm copy with very little additional cost and stored in remote locations. The initial cost of microfilming can be recovered rather quickly from space savings and manpower utilization.

Information Retrieval

Modern techniques permit retrieval of these records at speeds comparable, in some applications, to real-time computer systems. Information on microfilm can be retrieved usually at less than five seconds. Substantial cost savings can be realized by reducing the retrieval time for information contained in a file that needs to be accessed frequently. More than a minute can be saved by randomly retrieving a piece of information in microfilm as compared to using a large tub file.

The program team appreciates the assistance of Mr. Joseph F. Trubia of the Criminal Court in providing very useful information on space savings by microfilming.

APPROXIMATE NUMBER OF DOCUMENT IMAGES PER 100 FEET OF FILM
(For Duo, Multiply Duplex Figures by 2)

Model and Reduction Ratio	Document Length in Inches												
	3"	4"	5"	6"	7"	8"	8½"	9"	10"	11"	12"	13"	14"
Hand Feeding RW and RS													
24:1	6,520	5,330	4,520	3,920	3,480	3,090	2,940	2,800	2,560	2,350	2,170	2,030	1,880
32:1 Duplex	8,740	7,140	6,050	5,240	4,620	4,140	3,930	3,740	3,420	3,140	2,910	2,710	2,530
40:1 Duplex	10,800	8,850	7,500	6,500	5,740	5,140	4,870	4,650	4,240	3,900	3,620	3,360	3,150
45:1 Duplex	12,200	9,800	8,390	7,280	6,410	5,740	5,450	5,180	4,740	4,360	4,040	3,760	3,510
Auto. Feeding RW and RS													
24:1	8,100	6,350	5,220	4,430	3,850	3,410	3,220	3,050	2,760	2,520	2,330	2,160	2,000
32:1 Duplex	10,820	8,500	7,000	5,920	5,140	4,550	4,310	4,080	3,690	3,380	3,100	2,880	2,680
40:1 Duplex	13,300	10,500	8,680	7,360	6,400	5,650	5,350	5,060	4,580	4,290	3,850	3,570	3,330
45:1 Duplex	15,000	11,700	9,700	8,240	7,150	6,320	5,980	5,660	5,120	4,680	4,300	4,000	3,720
Hand Feeding RO-1, RO													
20:1	5,520	4,540	3,820	3,320	2,920	2,620	2,460	2,320	2,140	1,970	1,830	1,700	1,590
32:1 Duplex	8,850	7,250	6,120	5,310	4,670	4,180	3,980	3,790	3,460	3,180	2,950	2,750	2,570
Auto. Feeding RO-1, RO													
20:1	6,880	5,380	4,420	3,760	3,260	2,880	2,730	2,580	2,360	2,120	1,950	1,810	1,680
32:1 Duplex	11,000	8,600	7,080	6,000	5,220	4,600	4,350	4,140	3,740	3,420	3,150	2,920	2,720
Hand Feeding RP, RP-1													
20:1	5,710	4,620	3,870	3,330	2,930	2,610	2,470	2,350	2,140	1,970	1,820	1,690	1,580

APPROXIMATE MAXIMUM FIELD SIZE REDUCTION TABLE
(Subject to 3% Variation)
RECORDAK MICRO-FILE MACHINES (EXCEPT MRG, MRG-1)

	35mm Unperforated Film Camera Aperture Size		16mm Unperforated Film Camera Aperture Size	
	1.75" Length	1.25" Width	1.50" Length	.59" Width
Reduction Ratio	Maximum Field Size in Inches			
6	10.50	7.50	9.00	3.54
8	14.00	10.00	12.00	4.72
10	17.50	12.50	15.00	5.90
12	21.00	15.00	18.00	7.08
14	24.50	17.50	21.00	8.26
16	28.00	20.00	24.00	9.44
18	31.50	22.50	27.00	10.62
20	35.00	25.00	30.00	11.80
22	38.50	27.50	33.00	12.98
24	42 00	30.00	36.00	14.16
26	45.50	32.50	39.00	15.34
28	49.00	35.00	42.00	16.
30	52.50	37.50	45.00	17.70
32	56.00	40.00	48.00	18.88
34	59.50	42.50	51.00	20.06
36	63.00	45.00	54.00	21.24

APPROXIMATE NUMBER OF EXPOSURES PER 100 FEET OF FILM (16mm or 35mm) WITH RECORDAK MICRO-FILE MACHINES (EXCEPT MRG, MRG-1)

(The numbers shown below the line apply only to 35mm film)

Document Length in Inches	REDUCTIONS														
	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
4	2182	2666	2823	→											
6	1500	1846	2182	2510	2823	→									
8	1143	1411	1675	1932	2182	2429	2666	2823	→						
10	923	1143	1358	1570	1778	1982	2182	2378	2571	2761	2823	→			
12	774	960	1143	1323	1500	1674	1846	2015	2182	2346	2507	2667	2823	→	
14	666	828	986	1143	1297	1450	1600	1748	1895	2039	2182	2322	2459	2595	2728
16		727	867	1006	1143	1278	1412	1544	1674	1803	1931	2057	2181	2304	2426
18			774	898	1021	1143	1263	1382	1500	1617	1732	1846	1958	2059	2159
20			699	812	923	1033	1143	1251	1358	1465	1570	1674	1776	1877	1977
22				740	842	943	1043	1143	1241	1339	1436	1532	1628	1724	1819
24				680	774	867	960	1052	1143	1233	1323	1412	1500	1588	1694
26					716	803	889	974	1059	1143	1226	1309	1391	1473	1554
28					666	747	828	907	986	1065	1143	1220	1296	1372	1448
30						699	774	849	923	997	1070	1143	1215	1297	1369
32							727	798	867	937	1006	1075	1143	1211	1279
34							686	752	818	884	949	1014	1078	1142	1206
36								712	774	836	898	960	1020	1080	1140
38								675	735	794	852	911	969	1027	1083
40									699	755	812	867	921	975	1029
42									666	721	774	828	880	932	984
44										689	740	791	841	891	941
46											709	758	808	856	904
48											680	727	773	819	865
50												699	745	791	835
52												673	717	761	805

Appendix F

QUESTIONNAIRE - PRELIMINARY FORMS FOR CASE FLOW, PERSONNEL, AND TIME STUDIES

Appendix F
QUESTIONNAIRE - PRELIMINARY FORMS FOR CASE FLOW, PERSONNEL AND TIME STUDIES

Department
Location
Department Head
Person(s) Interviewed

Project
Investigator
Date

Information Available:

- ☐ Organizational chart of department
- ☐ Personnel information:type,number,salary & benefits.
- ☐ Work classifications.
- ☐ Prediction of future personnel and space needs.
- ☐ Reports from previous studies.
- ☐ Plan showing layout of existing or proposed furniture & equipment.

Where is this information available?

F1 At what stage does a case enter the department?

D1 In what form does a case enter the department? Who receives the case?

F2 From what department and person does the case enter the department?

F3 How is the case screened and by whom ?

F4 Under what conditions is the case accepted or rejected by the department?

D2 What entries are made on the case and what documents are added?

F5 How is the case processed through the department and by whom? Detail step-by-step description of sequence of operation. How long does each operation take?

Operations Performed	Person(s) involved	Time taken

P1 How many and what type of personnel work in the department? What work are they involved in and what are their furniture , equipment & space requiremtnts?

Type of personnel	No.of personnel	Work involved	Furniture & Equipment	Space Required		
				Furniture	Circulation	Total

F6 What are the major functions of the department?

F7 Does the case move to other departments during its process by this department?

F8 If it does, what departments and how frequent?

F9 With which department(s) or external agencies does the department collaborate?

F10 In what form and in what area do these department(s) or agencies collaborate?

F11 Are there delays in the processing of a case through the department? And if so, at what stages do these delays occur?

T1 How long are these delays?

F12 What are the causes of delays?

F13 Are actions planned or being taken to reduce or eliminate these delays?

T2 What is total amount of time that a case remains in the department?

T3 Are there deadlines to which a case in the department has to keep?

P2 What is the number and type of cases that each staff member is responsible for? Case load per person.

P3 Who does the final checking of a case before it leaves the department?

F14 At what stage does the case leave the department?

D3 In what form does the case leave the department?

F15 How does the case move to another department?

T4 How long does it take to move the case to another department?

F16 Which department and who receives the case for further processing?

F17 What further actions are necessary to dispose of case?

S1 How are existing spaces related to existing operations? Sketch plan.

S2 What are the functional relationships which determine space allocation and planning?

S3 What are the priorities in space allocation and utilization?

S4 What are the volume and significance of movement patterns for the different types of people in the various sections of the department?

Person or type of person	Movement to other section or person	Purpose of movement	Significance of movement (scale 0-3)	Frequency of movement	Time spent

S5 How should existing spaces relate to existing operations? Sketch plan.

S6 How should spaces be related under improved operations? Sketch plan.

S7 How much space should each section or operation need?

S8 Are there sections of the department that can be located away from present location without adversely affecting operational efficiency?

F18 What changes are anticipated or being implemented in the department?

F19 Are these changes administrative? Operational? Personnel?Spatial?

F20 What impact would these changes have on the structure and operation of the department?

F21 What impact would these changes have on the operation of other departments?

T5 When are these changes anticipated?

F22 What are the problems associated with these changes ? Have solutions been found ?

P4 Has any prediction been made on future personnel, equipment and space needs? If yes, what are the results?

Year of prediction	Type of personnel	No. of personnel	Work classification	Equipment needs	Space (sq.ft.) Equipment	Circulation	Total

P5 Who are the visitors to the department? What are the departments of origin and destination? What are the purposes of their visits and how long do they stay in the department?

Type of visitors	No. of visitors per hr./ per day	Origin	Purpose of visits	Significance of visits (scale 0-3)	Documents involved	Time spent	Destination

P6 Who in the department receives and assists visitors?

T6 Which parts of the day and of the week have the most visitors? How many visitors at one time?

S9 What type of space and facilities are needed by visitors?

Appendix G
PRESENTATION TECHNIQUES

Appendix G
PRESENTATION TECHNIQUES

Comprehensive and integrated presentations are essential to the information communication process. Feasible and imaginative ideas would remain ideas if they were not properly synthesized and presented. The program team has assessed the goals and scope of the program, and has developed a list of presentation techniques for the results or findings to be presented visually or audibly. The list includes alternative choices for presenting ideas and results with the preferred choice listed first and the least effective choice last. Generally, the better the presentation, the higher the cost. The program team believes that to produce a marketable product at the end of the program, the methods of presentation should be the most effective possible within the available budget. Having determined the type of presentation, progress reports will be produced according to the presentation guidelines, eliminating duplication. In addition to the written presentation, available presentation techniques include:

Studies	Presentation Techniques
Operations	Flow charts, photographic survey or highlight, matrices, relationship diagrams.
Documents	Flow charts, standardized documents, matrices.
Personnel	Organization charts, matrices, graphs, tables, computer printouts.
Time and delays	Time related flow charts, photographic survey or highlights, charts, graphs, tables.
Spaces	Plans, drawings, models, photographic survey, relationship diagrams, computer printouts, graphs, tables.
Site Planning	Plans, drawings, models, photographic survey, charts, graphs, tables.
Comparisons	Graphs, table, charts, matrices, models, computer printouts.
Case backlogs	Graphs, table, charts, computer printouts.
Engineering	Plans, drawings, charts, graphs, tables, computer printouts

Analysis — Charts, graphs, tables, plans, models, photographic survey, computer printouts.

As part of the comprehensive presentation process, the program team has standardized the presentation format of drawings, plans, tables and charts contained in the report. All drawings and tables are presented in the standardized format, and all manuscripts are also typed according to an established format.

Model of the Criminal Court Building

A 1/16 inch scale working model of the Criminal Court Building is being completed. Each floor is demountable by sections so that block use as well as detailed layouts of space can be illustrated three dimensionally. The model is for demonstration purposes for court personnel and judges who are unfamiliar with floor plans and can more readily understand the concepts through visual presentations. Both the existing use of space and alternative plans can easily be demonstrated. The model will also be useful in future demonstrations of space plans.

Appendix H

COLLABORATION WITH RELATED AGENCIES

Appendix H
COLLABORATION WITH RELATED AGENCIES

Master Calendar Project and Appearance Control Project

Mr. Jim Lacy of the Vera Institute of Criminal Justice met with the program team to describe their projects. The Appearance Control Project includes the reduction of the number of court appearances, and experimentation with both the telephone and the surveillance alert system for witnesses and complainants. To control the number of appearances of police officers, charts have been developed to record their availability for the entire year. These charts are completed by patrolmen in the police force. The Master Calendar Project is geared toward the consolidation of space for the arraignment process; the need for more effective supportive personnel; the consolidation of the existing fragmented Parts structure; and the possibility of splitting or staggering calendars.

Electronic Data Processing

The program director met with the PMI team working on a scheduling algorithm for criminal court cases. They agreed to send information on calendaring systems relating to the program. This information includes the approximate time segment for criminal cases and a simulation study of case scheduling for MAP operations.

The Mayor's Criminal Justice Coordinating Council

Mr. Al Appleton of the CJCC met with the program director to discuss the availability of statistical and supportive materials used in Mayor Lindsay's recommendations on courts. A report by Mr. Steven H. Clark on case flow and congestion in the New York Criminal Court from 1959 to 1968 has been obtained and some preliminary collaboration procedures on data compilation have been established. Mr. Appleton suggested that the following people be contacted for additional information: Mr. Paul Dixsten, and Miss Carol Gerstel of the Program Planning Department of the Bureau of Budget. Reports

have been received on the All-Purpose Part operation. Mr. Edward Robin, Executive Director and Mr. Donald Elliott, Chairman of the City Planning Department of the City Administrator's Office, have been informed of our work. The program director is advising them on matters relating to court projects in New York City, in particular the court complex in Brooklyn.

Appendix I

PRELIMINARY TABLE OF CONTENTS FOR HANDBOOK

Appendix I
PRELIMINARY TABLE OF CONTENTS FOR HANDBOOK

Introduction

Summary

1. Program Proposal

    Pre-proposal Planning
    Proposal
    Budget Estimate
    Funding

2. Office Organization

    Staff Selection
    Equipment
    Supplies
    Office Space
    Accounting Procedures

3. Program Planning

    Definition of Problems
    Definition of Program Scope
    Sub-programs and Responsibilities
    Network of Sub-programs
    Task Assignment
    Staff Collaboration

4. Analysis Process

    Objectives
    Approaches
    Techniques
    Data Compilation
    Data Organization
    Analysis
    Evaluation
    Synthesis
    Presentation

5. Analysis of Existing Procedures

    Sequence of Operations
    Document Flow
    Movement Patterns of People
    Time Sequence and Delays
    Functional Relationships
    Spatial Relationships
    Engineering Studies

Court Security Problems
Evaluation Studies
Presentations

6. Manpower Prediction

Scope and Approaches
Planning
Techniques
Assumptions
Evaluation of Existing Manpower
Manpower Prediction
Personnel Management

7. Improvements

Trends and Changes in the Court System
Operations
Documents and Forms
Information Communication Systems
Court Security
Space Planning
Engineering
Feasibility Studies
Presentations

8. Space Planning and Space Standards

Existing Space Use
Planning and Design Criteria
Analysis Evaluation
Spatial Relationships
Predicted Space Requirements
Alternative Space Solutions
Detailed Space Recommendations
Space Standards
Feasibility Studies
Cost Analysis
Budget Planning

9. Engineering Standards

Structural
Mechanical
Electrical
Lighting
Acoustical
Transportation
Plumbing
Drainage
Fire Protection

10. Space Management

    Space Management Concept
    Techniques
    Changes in Administrative Structure
    Centralized vs. Decentralized Management
    Implementation

11. Implementation

    Phasing of Project
    Cost, Time, and Manpower Scheduling
    Budget
    Funding
    Consultants
    Construction
    Integrated Services
    Facility Operation
    Facility Maintenance

Bibliography

Index

Appendix J

EXISTING SPACE USE PLANS
SUPREME COURT BUILDING, 60 CENTRE STREET

Appendix J
EXISTING SPACE USE PLANS: SUPREME COURT BUILDING, 60 CENTRE STREET

Court

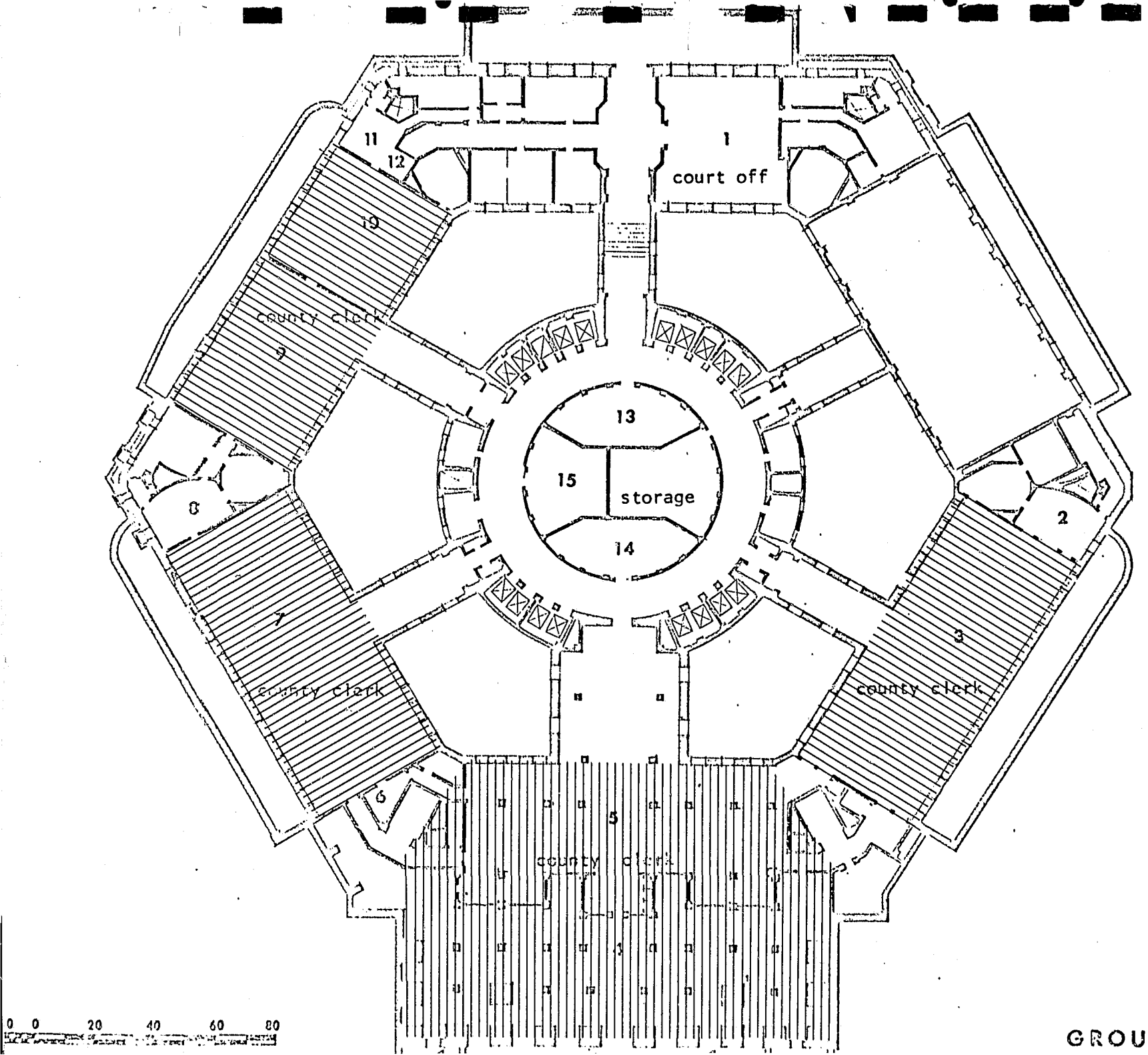
Judges Chambers

County Clerk

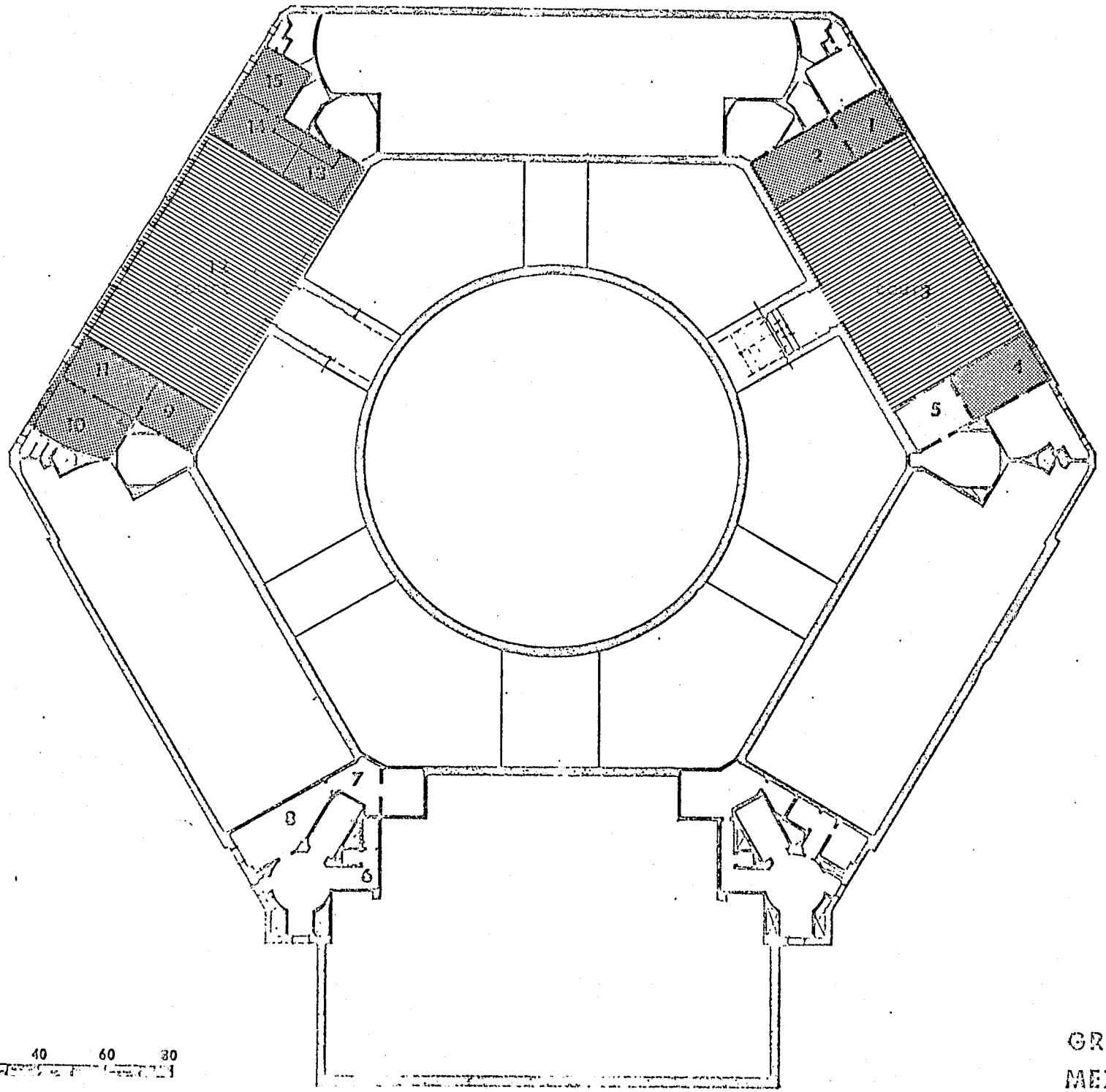
Robing Room

Office- Law Ass. or Court Clerk

Jury Room



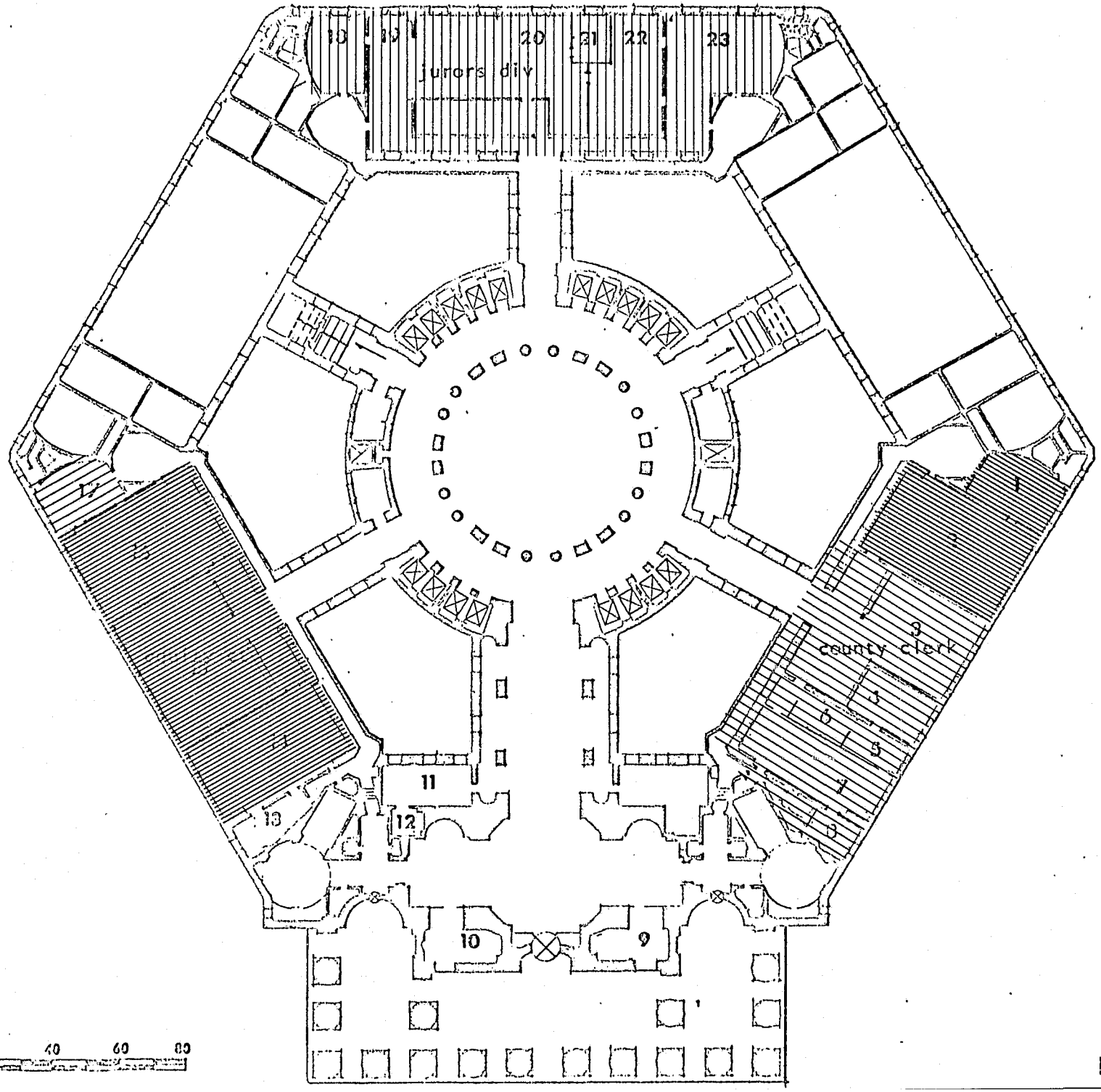
GROUND FLOOR



10 0 20 40 60 80

GROUND FLOOR
MEZZANINE

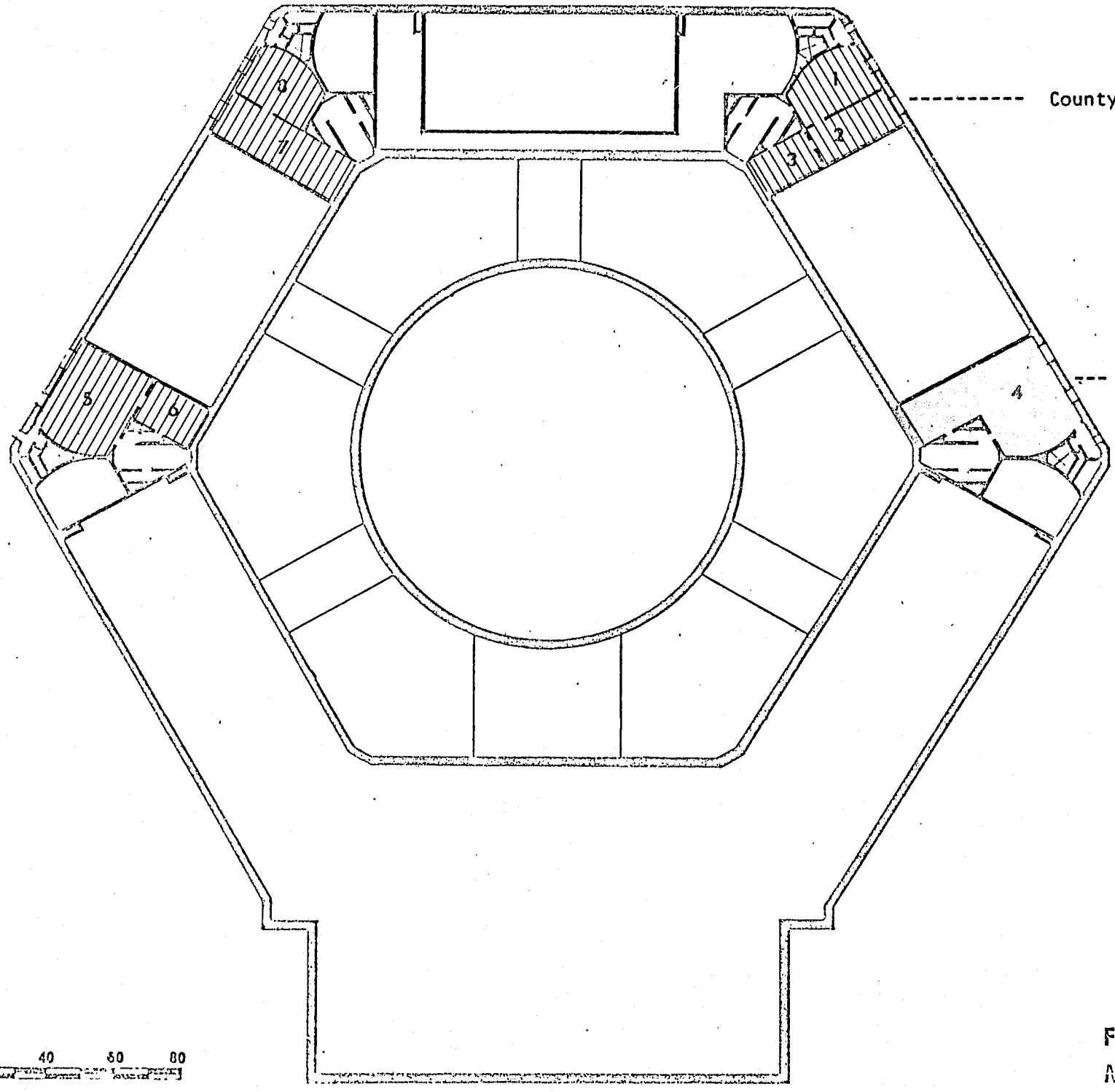
J-3



10 0 20 40 60 80

FIRST FLOOR

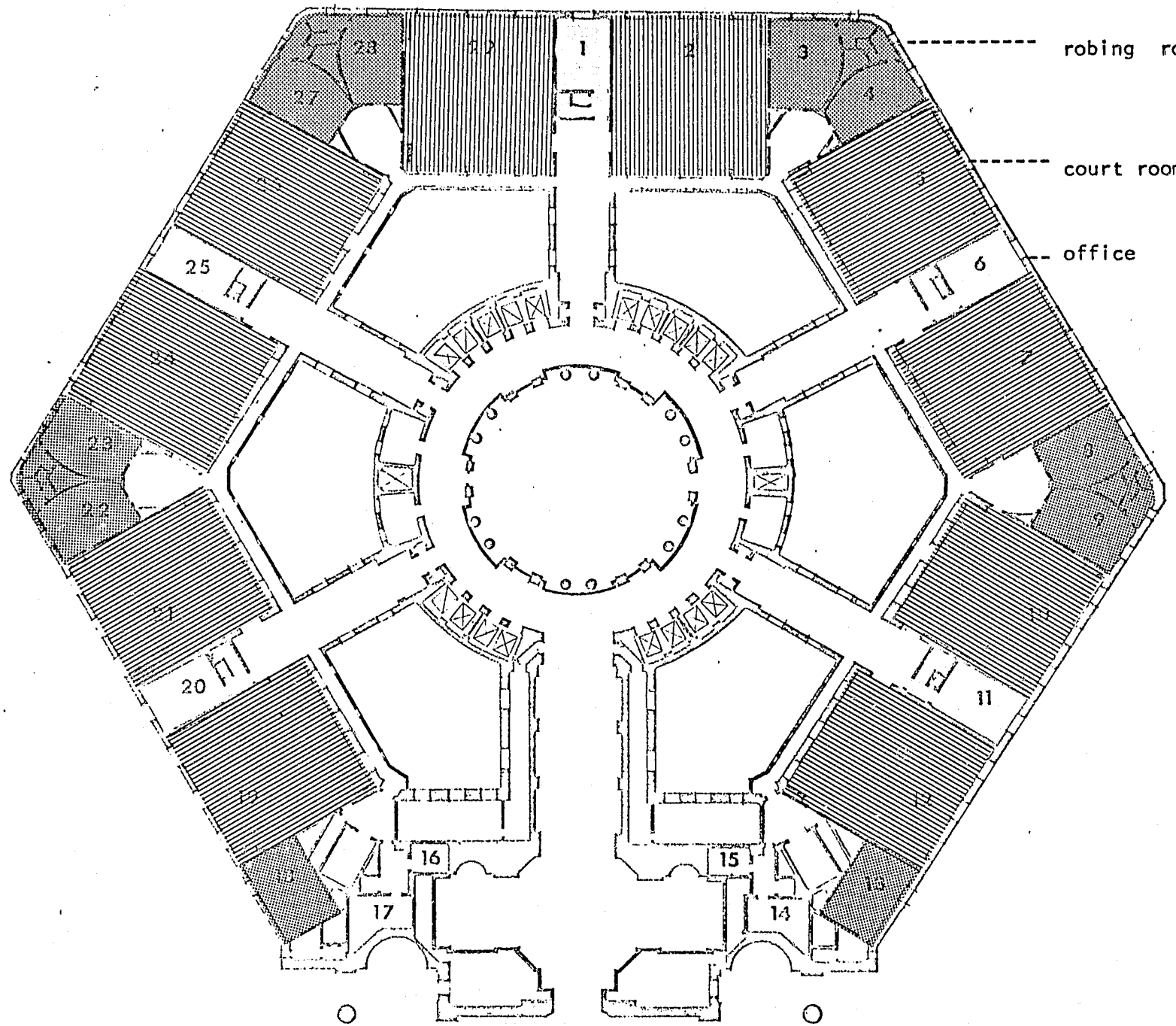
J-4



0 20 40 60 80

J-5

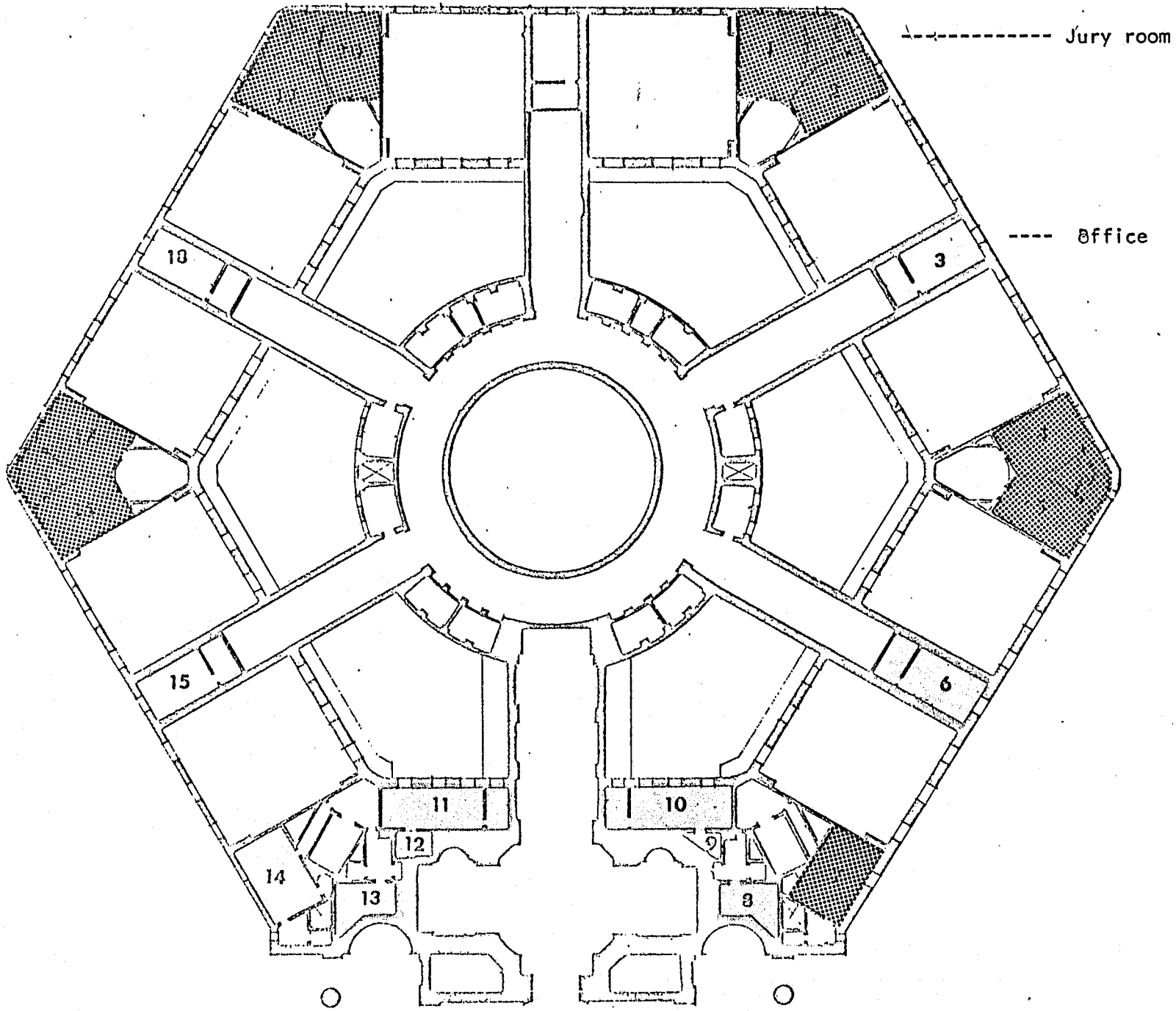
FIRST FLOOR
MEZZANINE



0 0 20 40 60 80

SECOND FLOOR

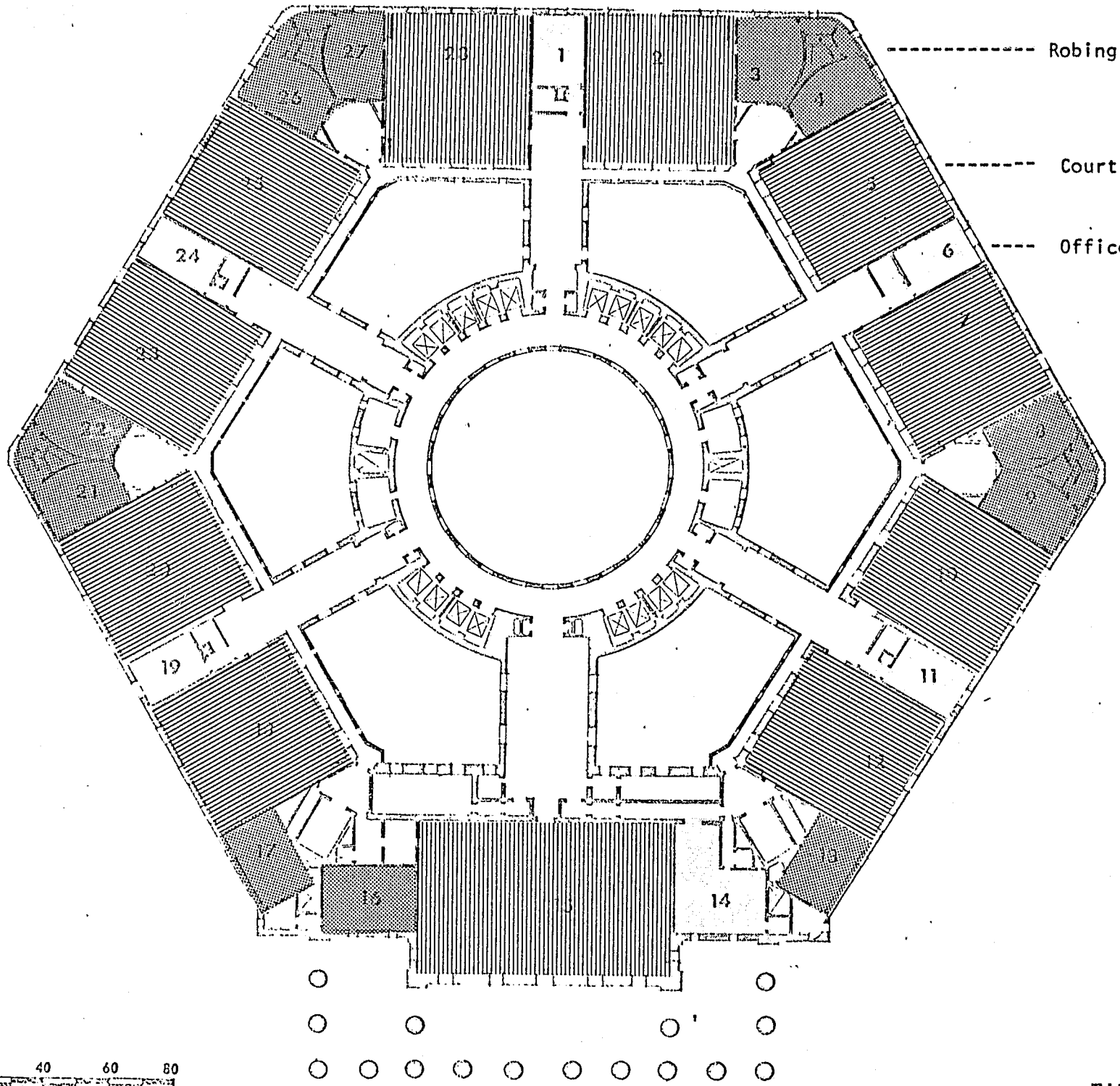
J-6



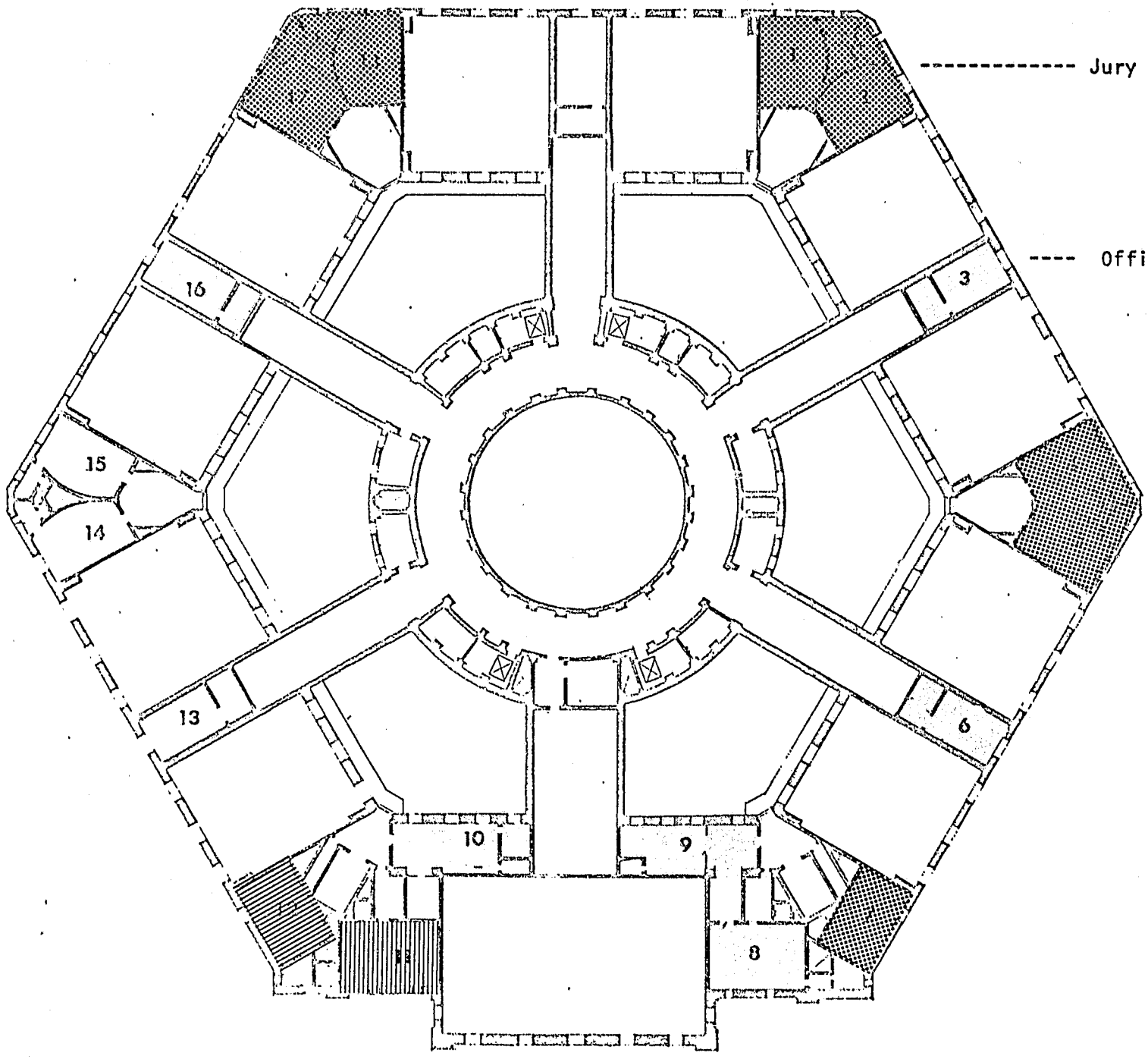
0 0 20 40 60 80

SECOND FLOOR
MEZZANINE

J-7

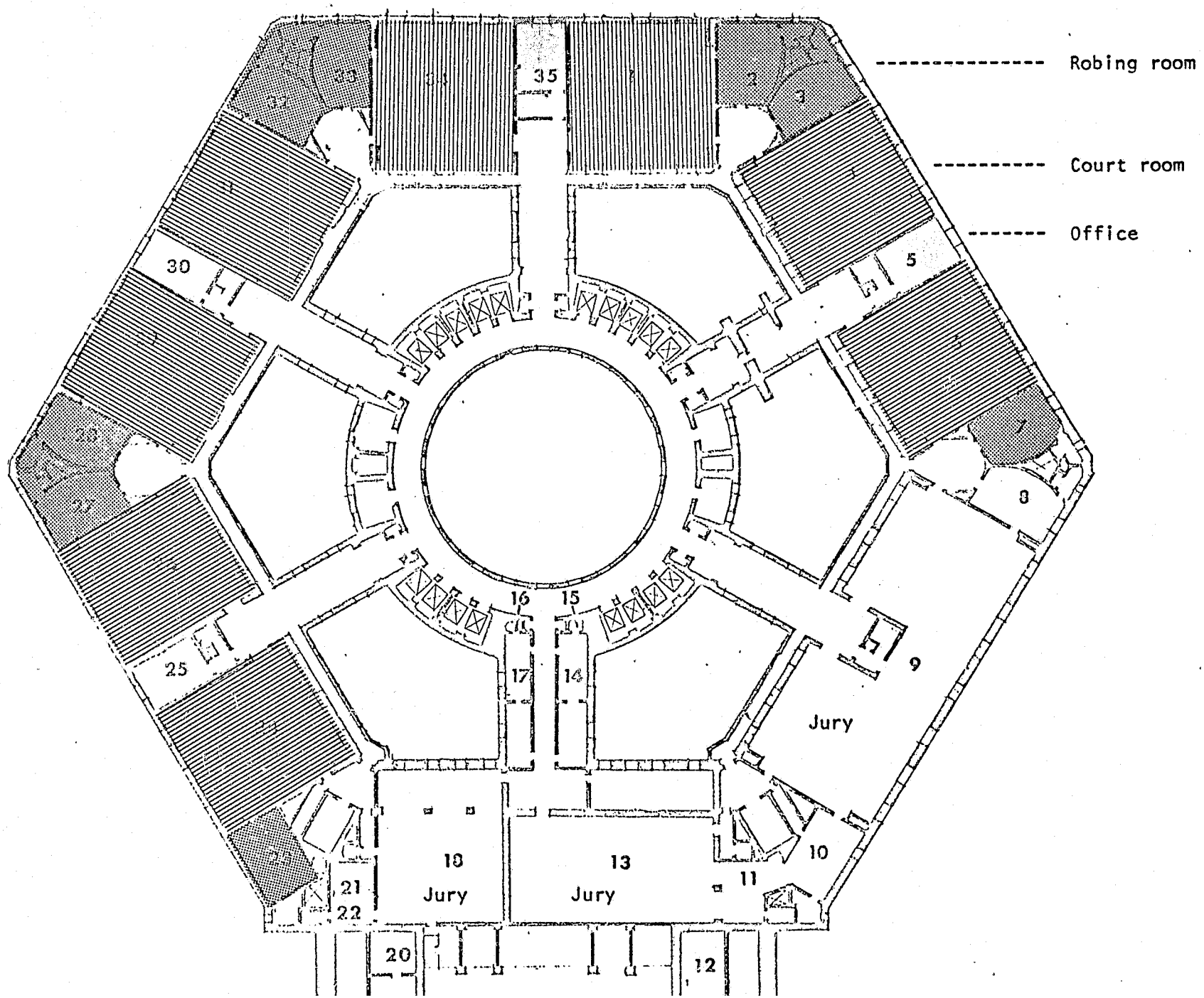

Robing room
Court room
Office
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
0 0 20 40 60 80

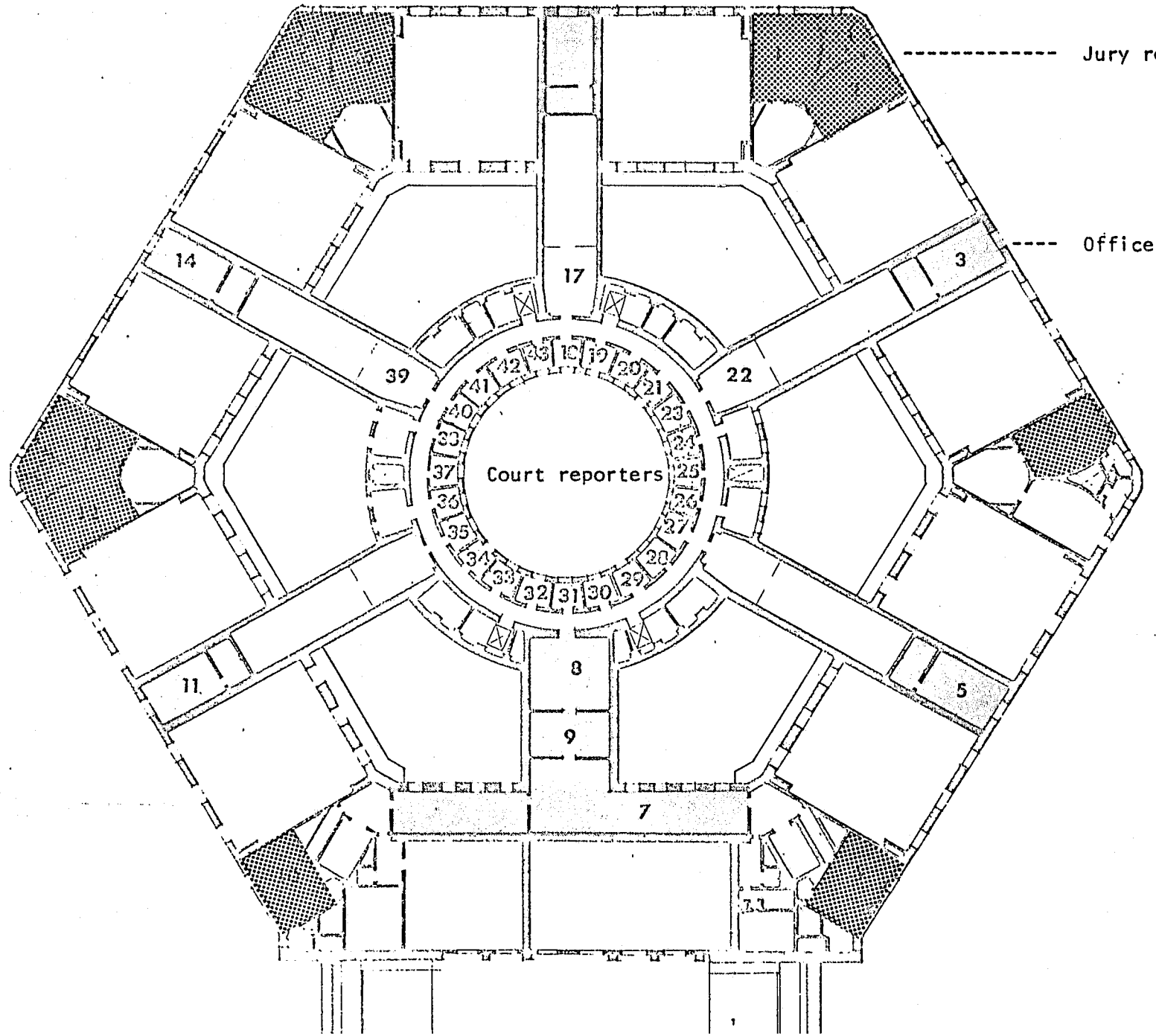
THIRD FLOOR

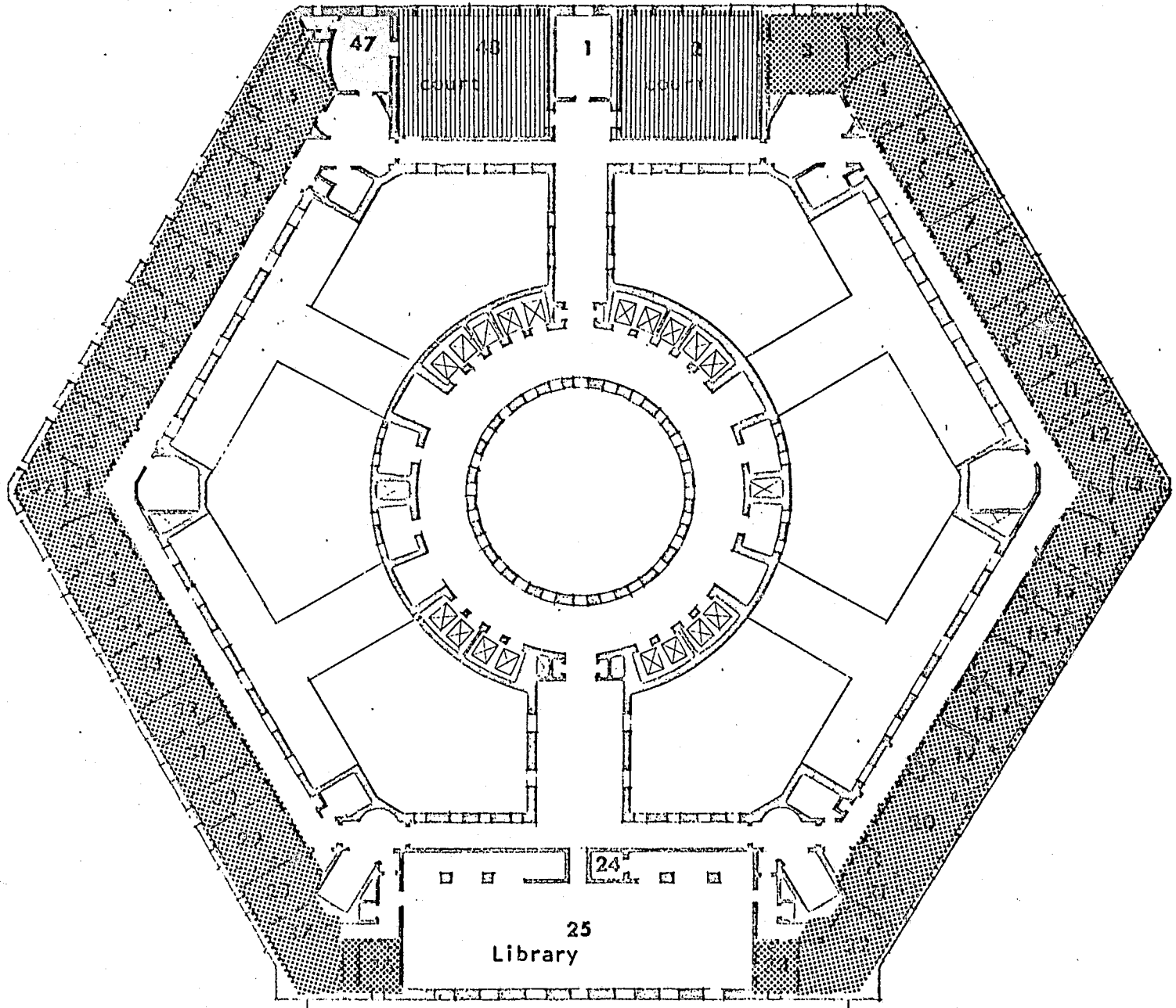


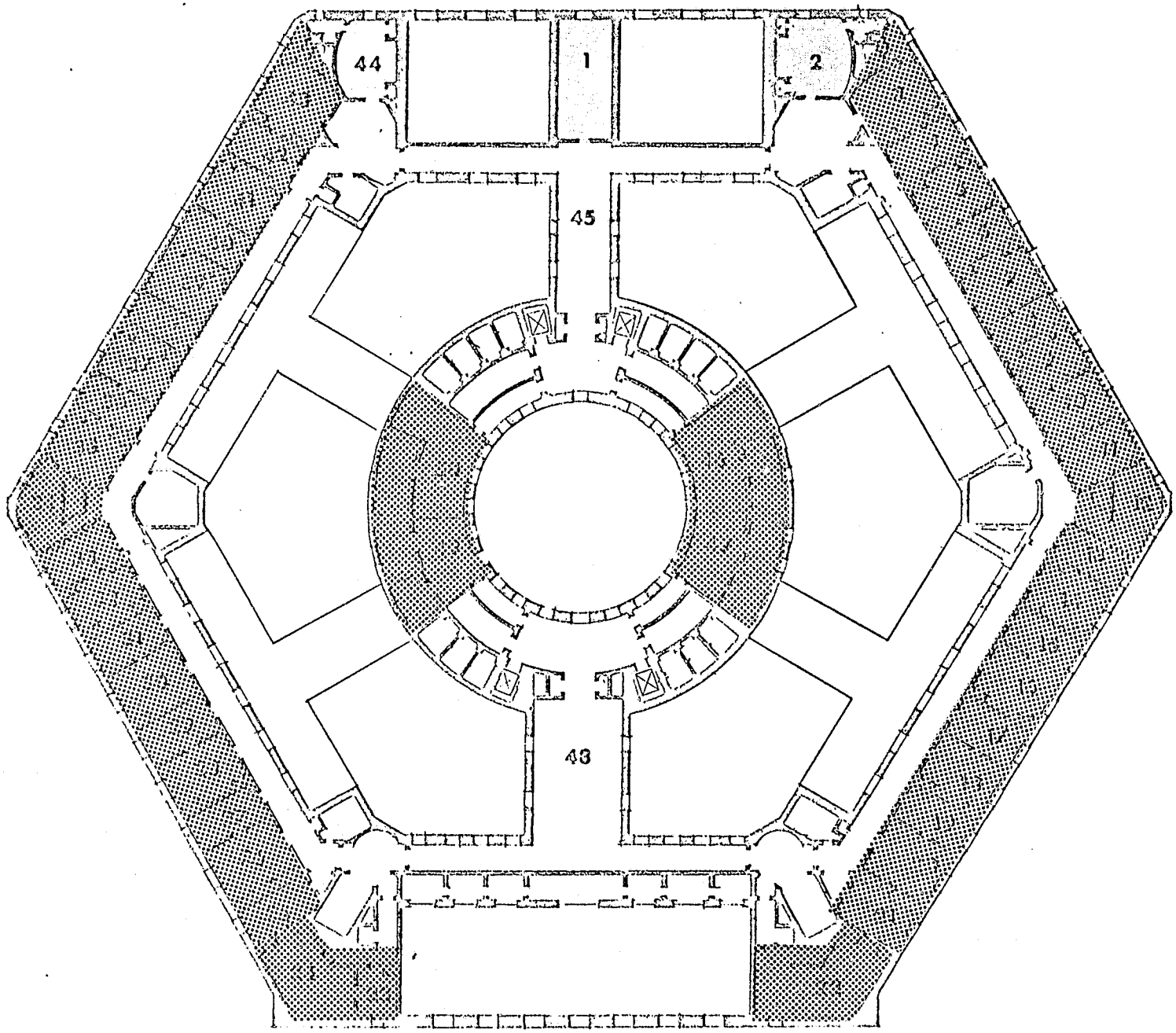
0 20 40 60 80

THIRD FLOOR
MEZZANINE

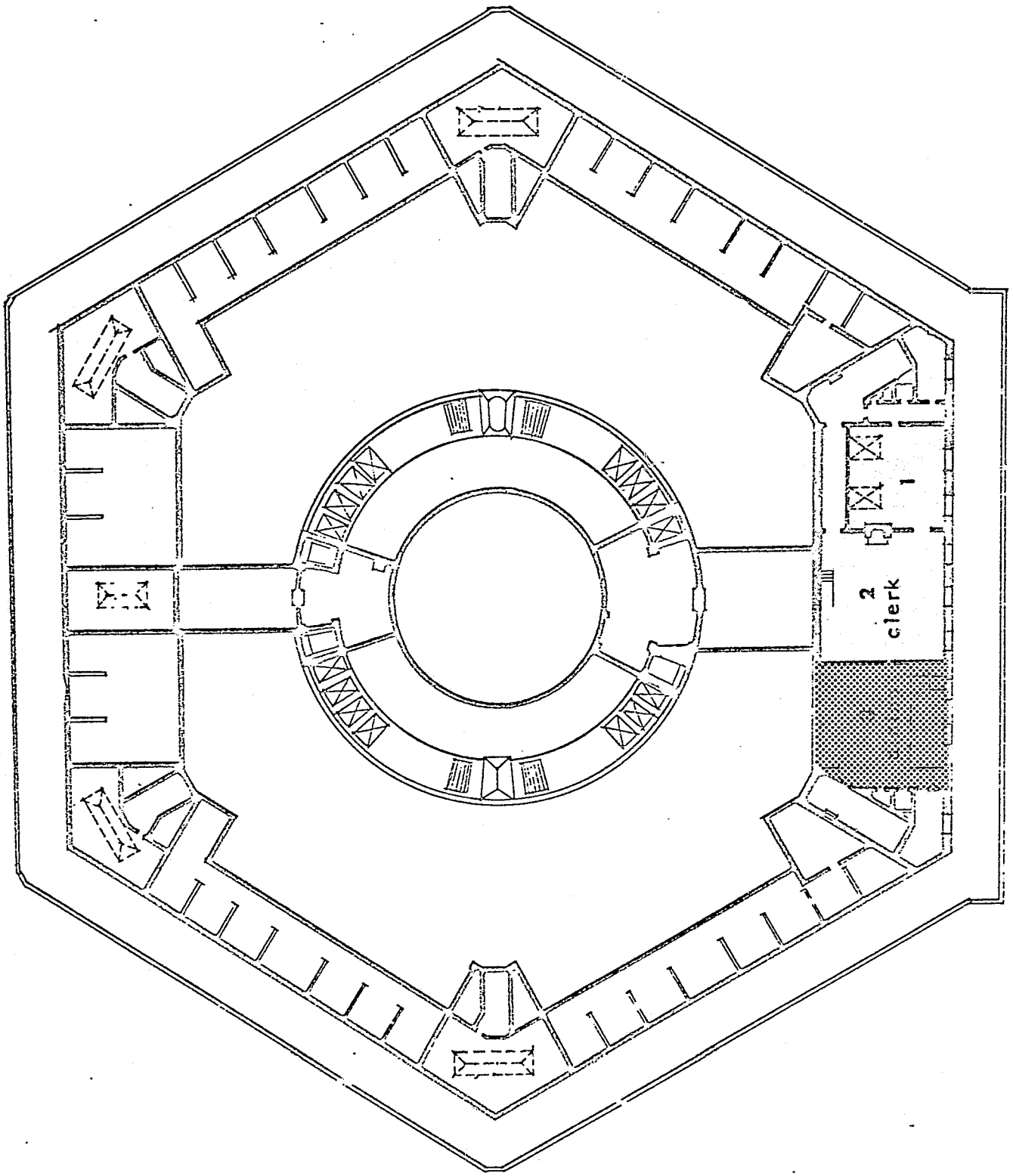

Robing room
Court room
Office
35
30
5
8
16
15
25
17
14
9
Jury
18
Jury
13
Jury
10
11
21
22
20
12


Jury room
Office
Court reporters
1
14
17
3
39
22
41
42
43
18
19
20
21
23
40
33
37
25
36
35
27
34
28
33
32
31
30
29
11
8
5
9
7


47
10
court
1
2
court
3
24
25
Library



Judges Chambers


1
2
clerk

AREA ANALYSIS: SUPREME COURT BUILDING, 60 CENTRE STREET

Floor	Gross Area (sq.ft.)	Ceiling Height	Net Area (sq.ft.)	Functional Area (sq.ft.)	Functional / Gross (per cent)
Sub-basement	49,348	14'-8"	55,500	13,391	17.1
Sidewalk Vault	4,851	22'-0"			
Sidewalk Vault	6,732	19'-8"			
Boiler Room	4,800	28'-8"			
Interior Light Courts	12,421	22'-0"			
Basement	36,576	20'-0"	41,849	31,885	58.5
Basement	6,650	15'-0"			
Basement	6,650	14'-0"			
Basement	4,660	10'-0"			
Mezzanine Basement	4,662	10'-0"	2,621	832	17.8
1	41,753	17'-6"	40,591	23,446	42.8
1	7,432	23'-6"			
1	5,568	11'-9"			
1st Mezzanine	5,568	11'-9"	4,192	3,940	70.8
2	54,273	21'-6"	34,965	22,944	42.3
2nd Mezzanine	22,346		8,076	6,250	28.0
3	51,153	22'-0"	39,489	27,043	50.3
Upper Rotunda	2,640	10'-6"			
Mezzanine	24,297		8,811	7,950	32.7
4	51,153	24'-0"	43,615	33,205	64.9
4th Mezzanine	26,583		15,213	13,424	50.5

Floor	Gross Area (sq.ft.)	Ceiling Height	Net Area (sq.ft.)	Functional Area (sq.ft.)	Functional / Gross (per cent)
5	38,297	13'-6"	31,237	20,044	52.3
5th Mezzanine	6,698	30'-8"			
6	38,297	17'-2"	25,224	16,731	43.7
7	12,452	16'-6"	7,900	3,364	27.0
TOTAL	526,860		359,283	224,449	42.6

Appendix K

EXISTING SPACE USE PLANS
CIVIL COURT BUILDING, 111 CENTRE STREET

CONTINUED

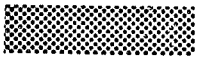
2 OF 3

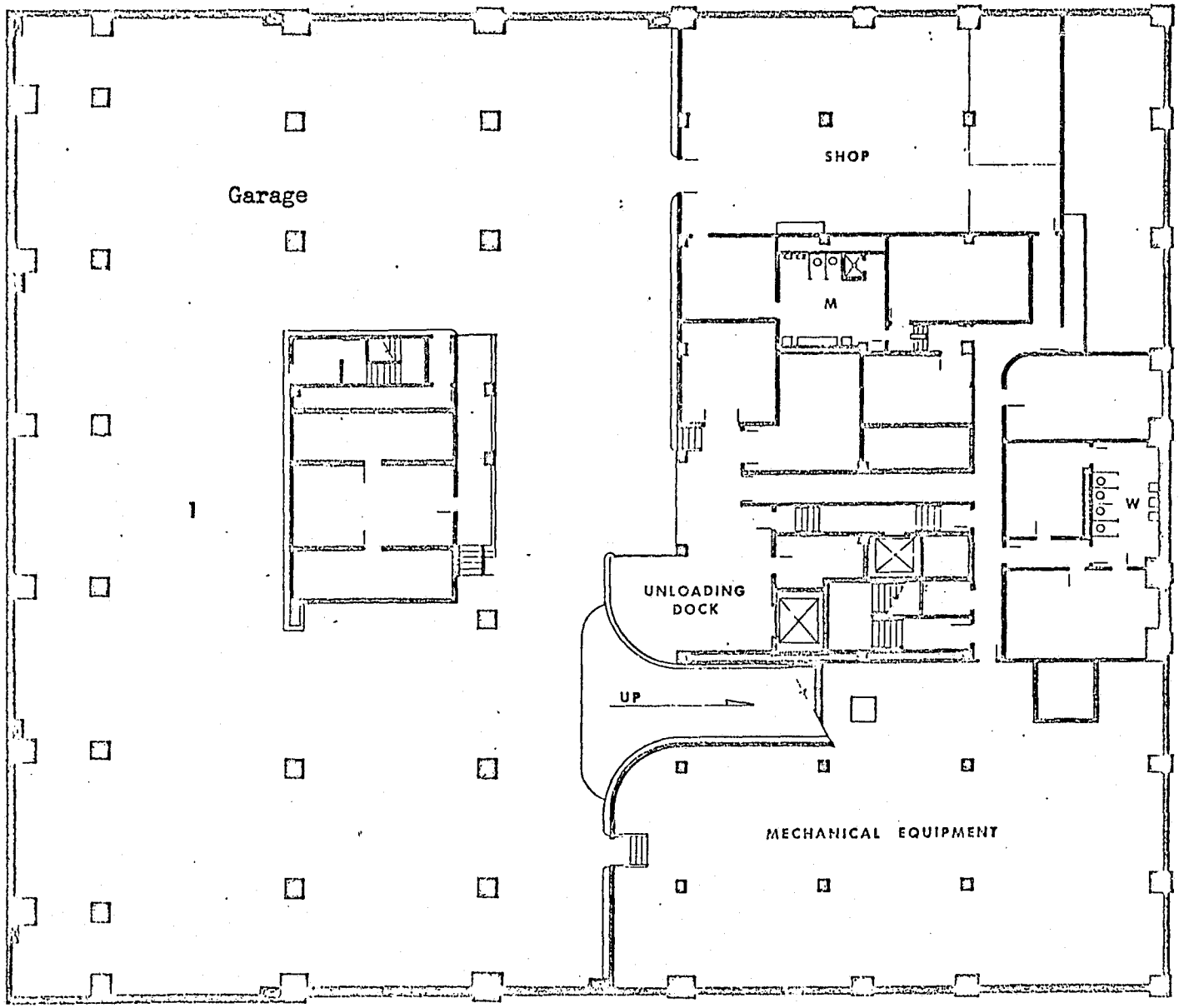
Appendix K
EXISTING SPACE USE PLANS: CIVIL COURT BUILDING, 111 CENTRE STREET

Courts 

Judges Chambers 

Clerks off. 

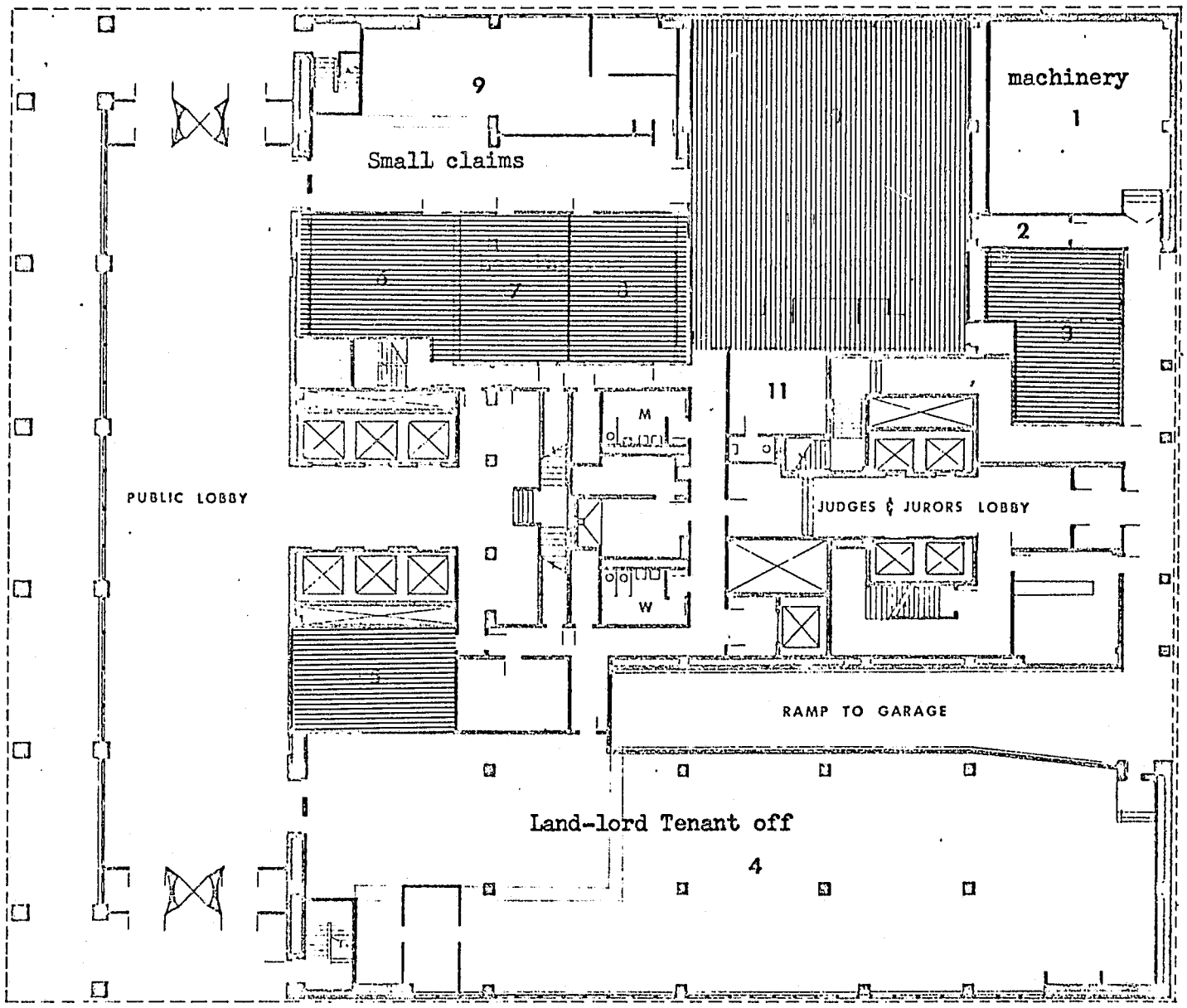
Jury/ Conference rooms 



SCALE 10 0 20 40 FT.

K-2

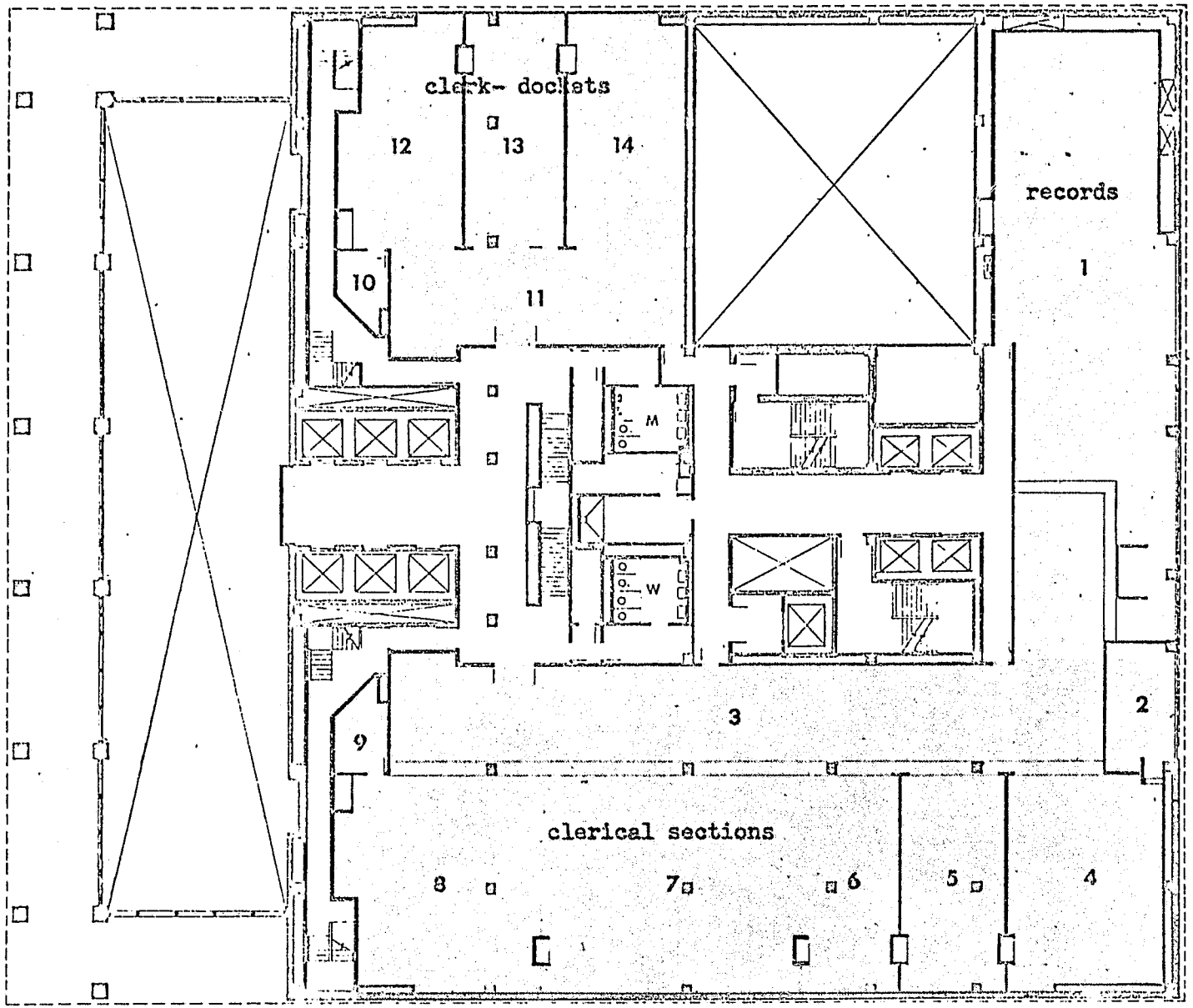
CELLAR



SCALE 10 0 20 40 FT.

K-3

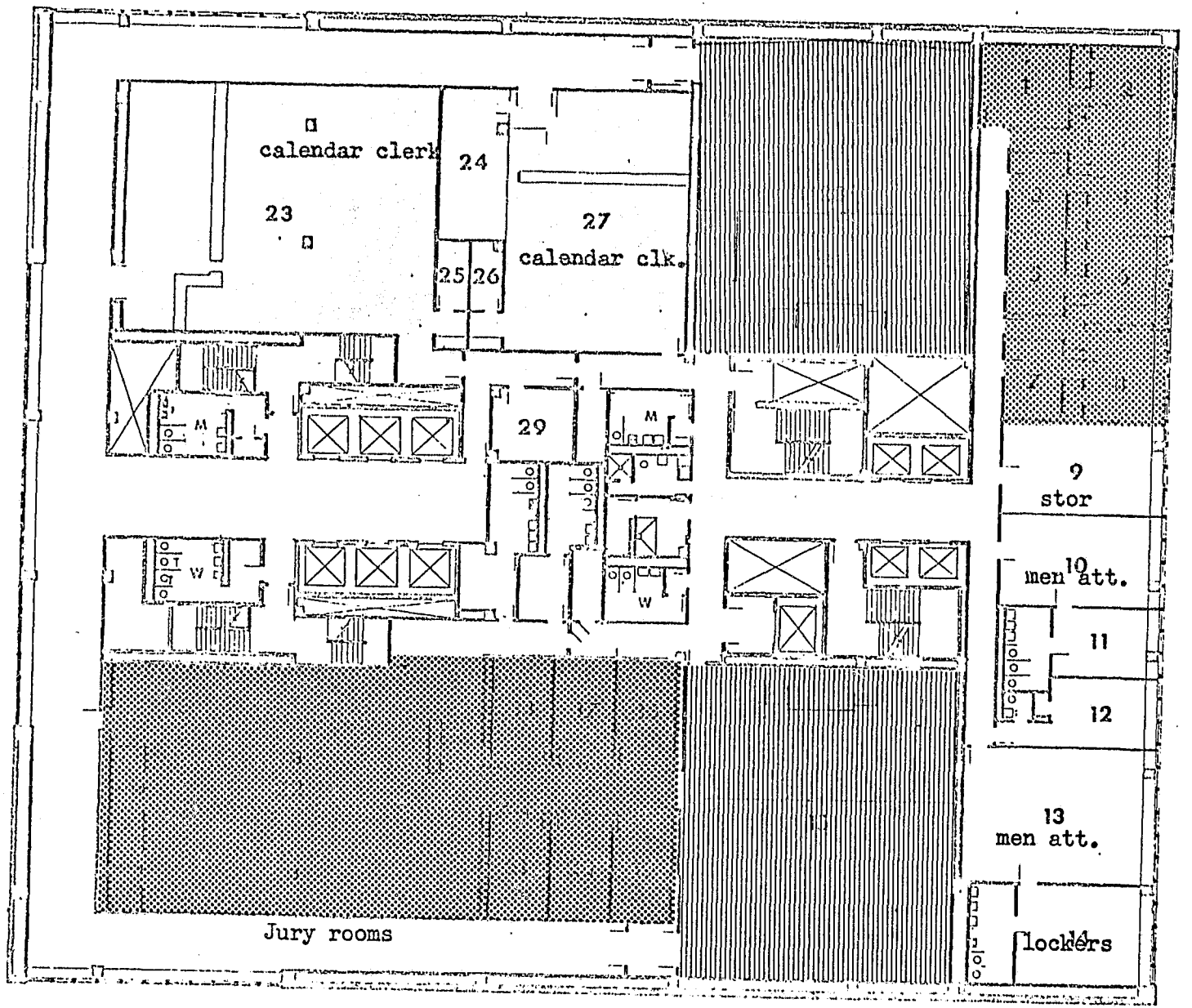
FIRST FLO



10 0 20 40 FT.
SCALE

K-4

SECOND FLOOR

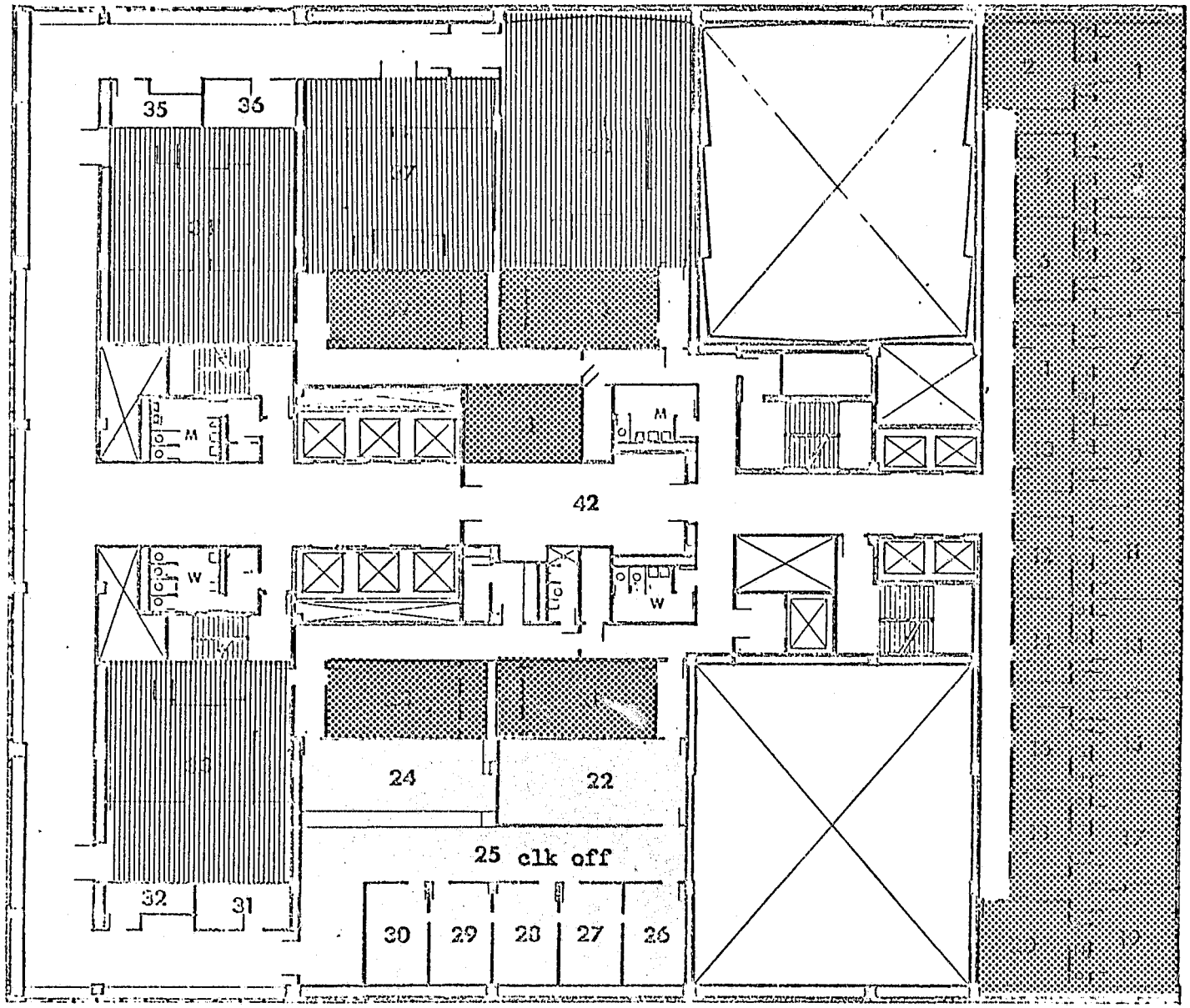


Judges chambers

SCALE 10 0 20 40 FT.

K-5

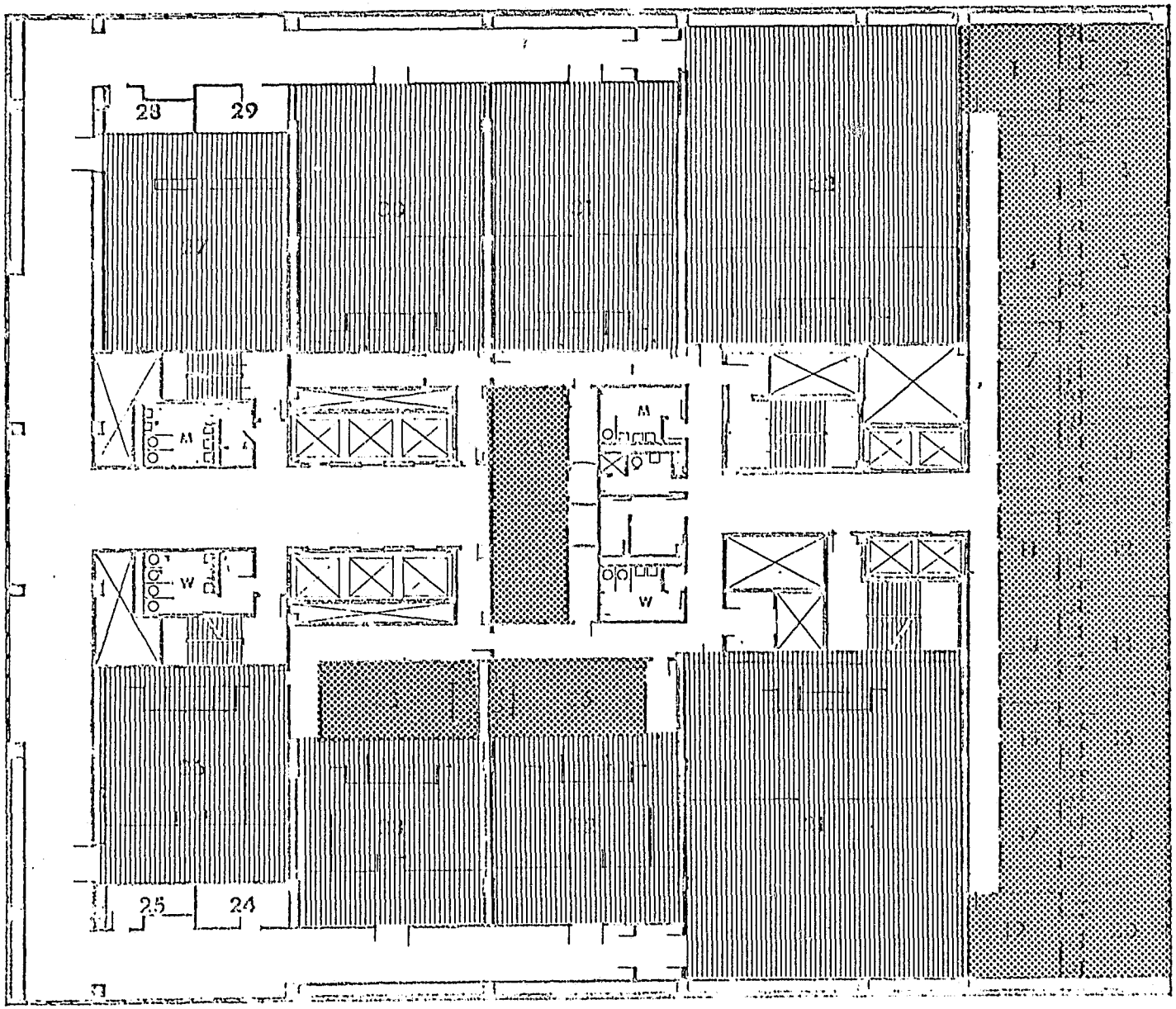
THIRD FLOOR



SCALE 10 0 20 40 FT.

K-6

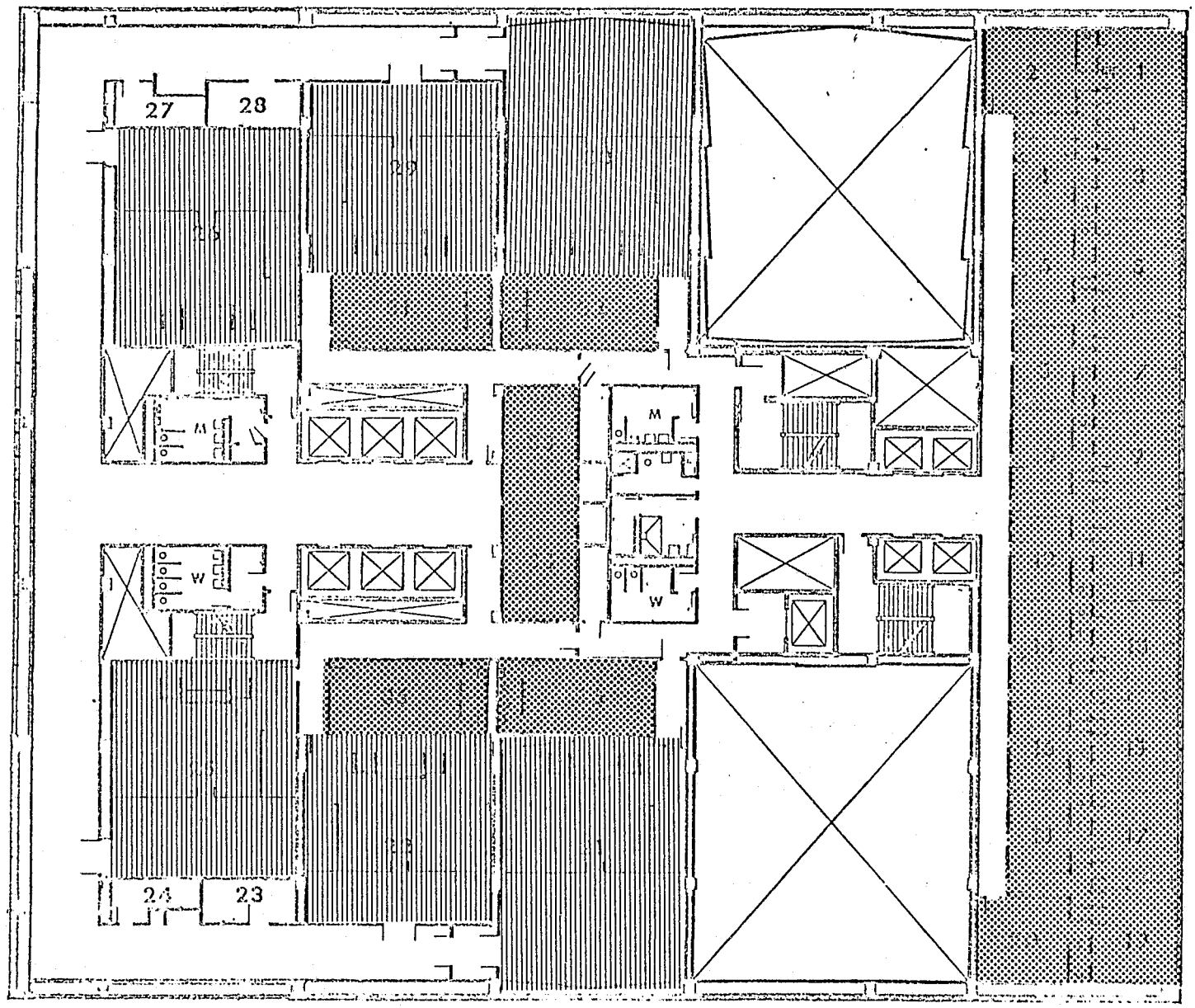
FOURTH FLOOR



SCALE 10 0 20 40 FT.

K-7

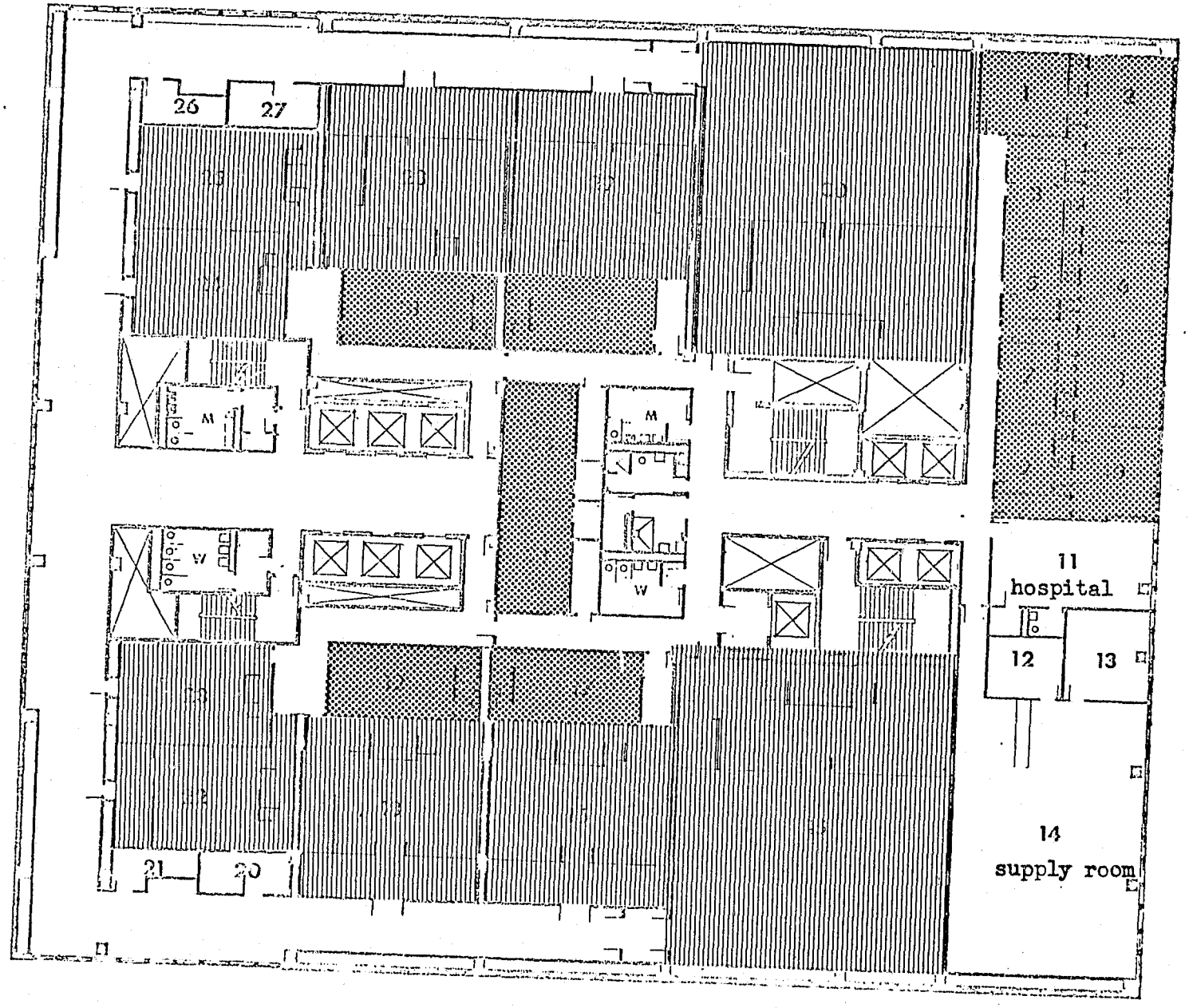
FIFTH FLOOR



SCALE 10 0 20 40 FT.

K-8

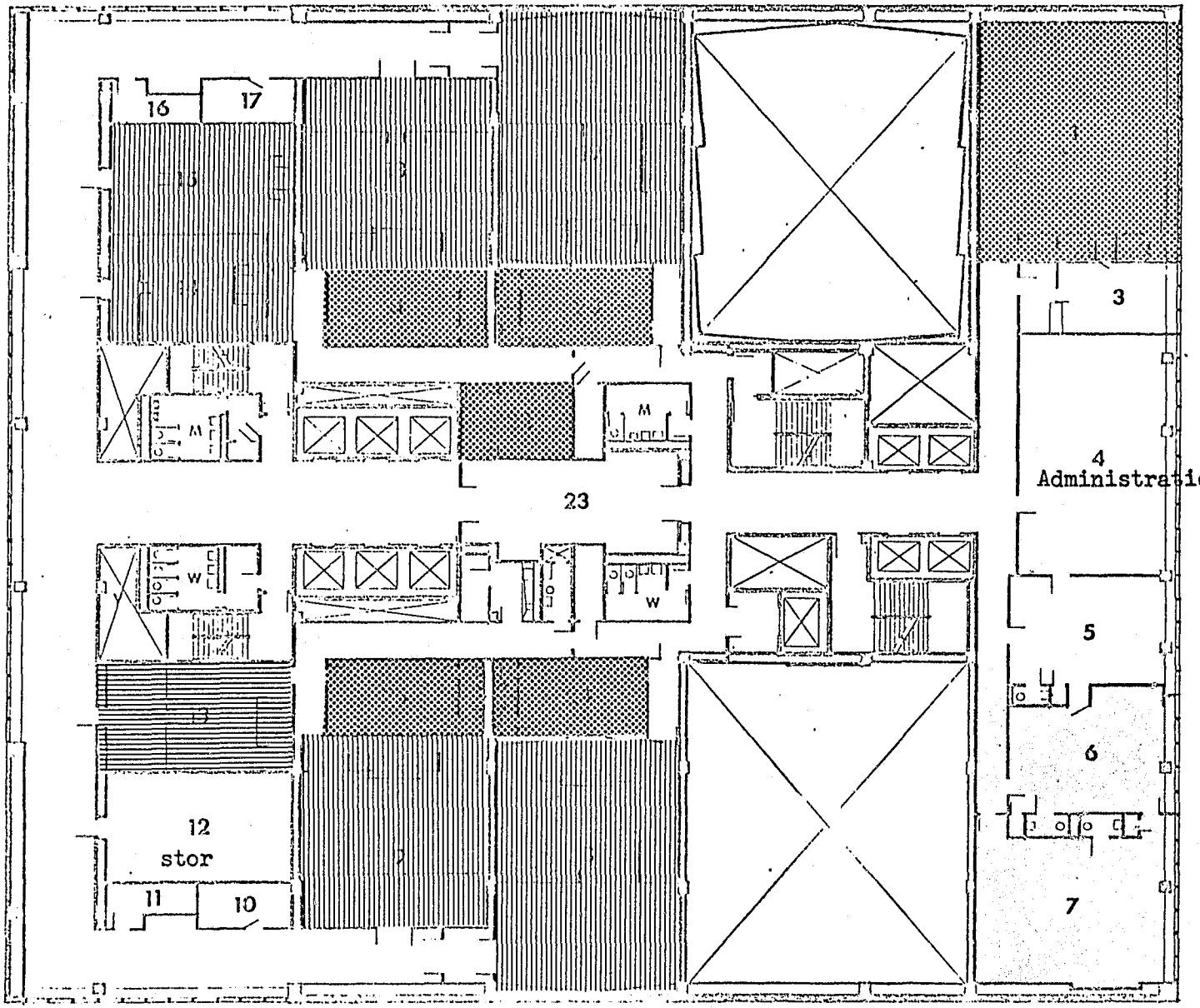
SIXTH FLOOR



SCALE

K-9

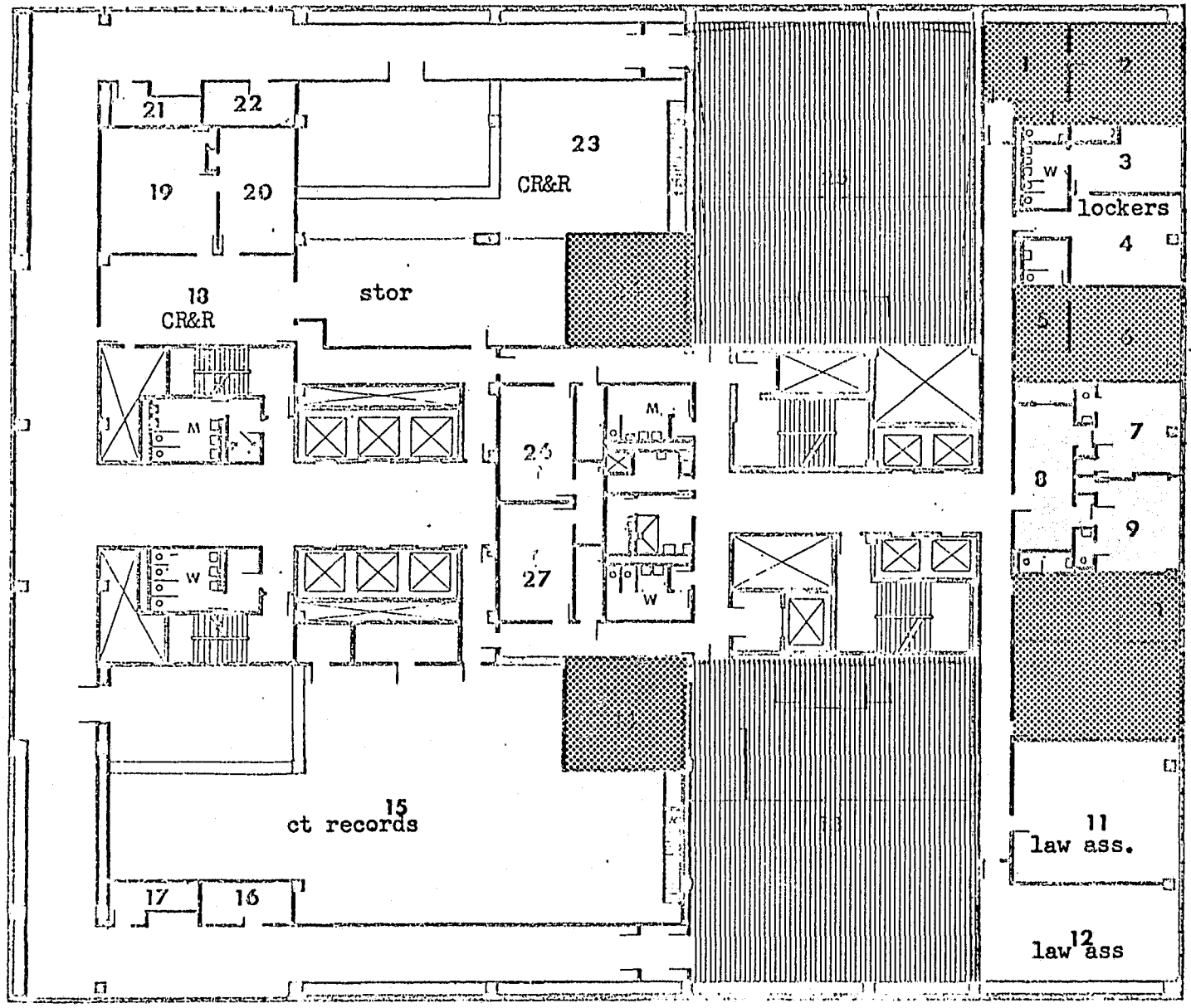
SEVENTH FLOOR



SCALE 10 0 20 40 FT.

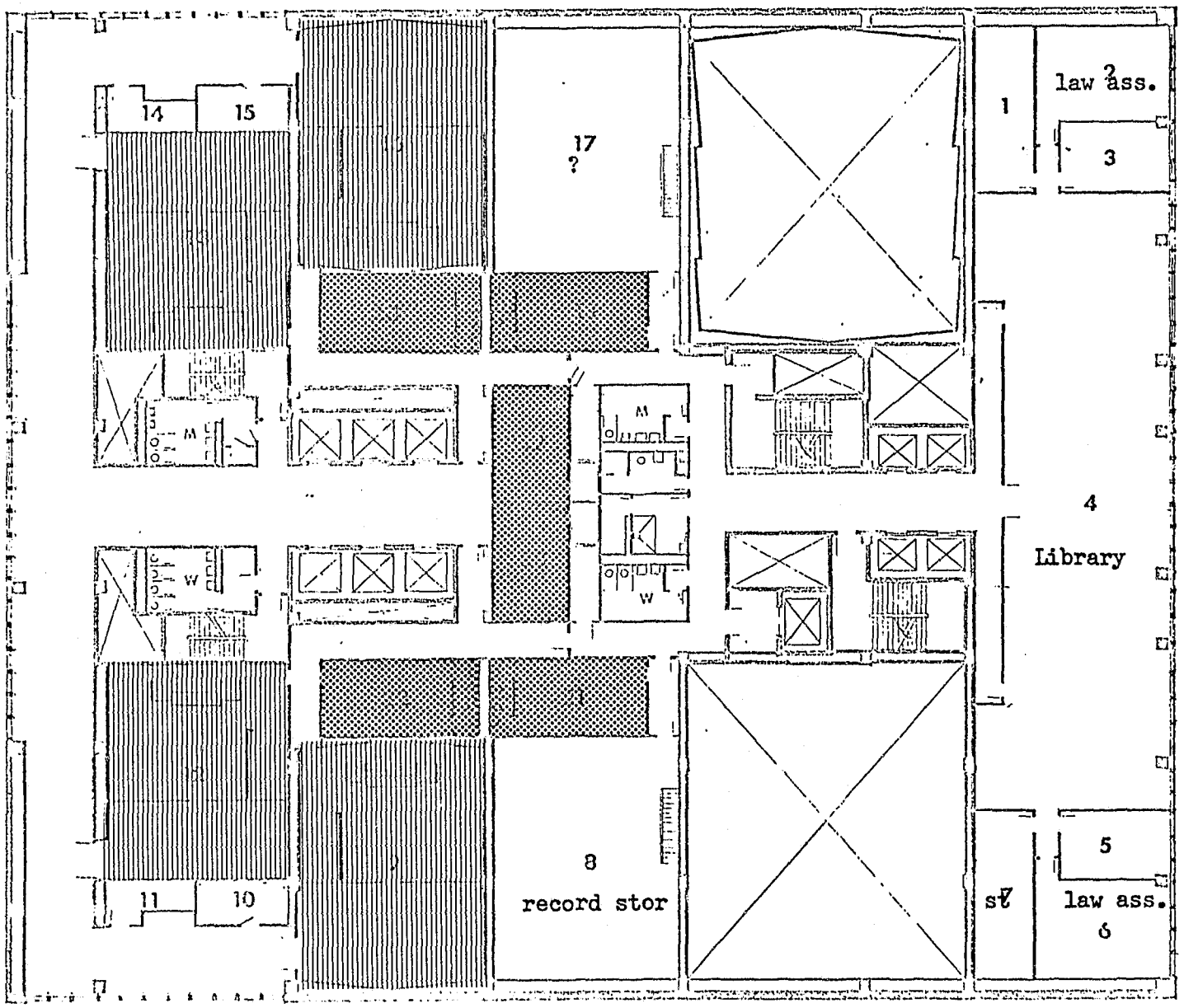
K-10

EIGHTH FLOOR



K-11

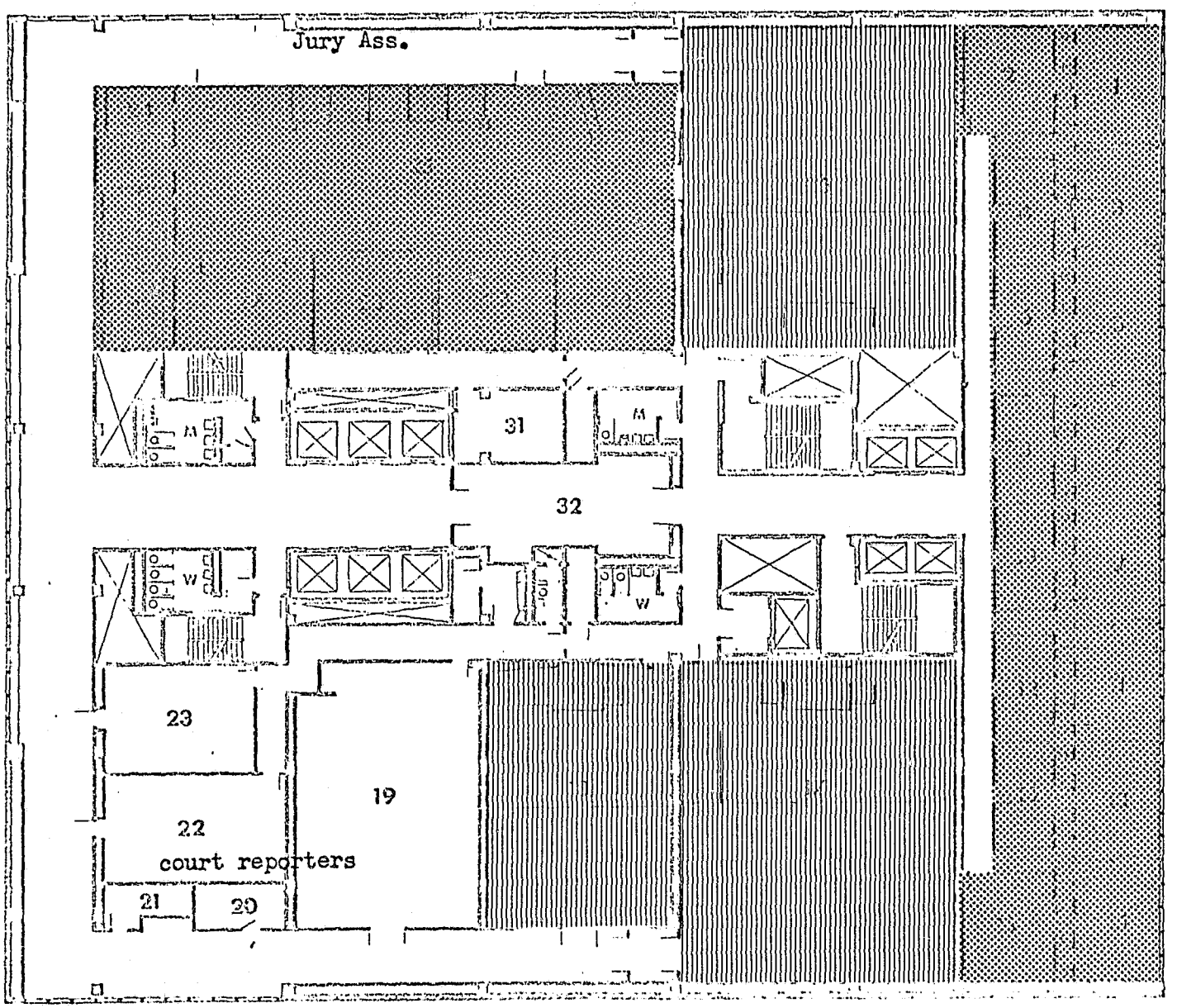
NINTH FLOOR



SCALE 10 0 20 40 FT.

K-12

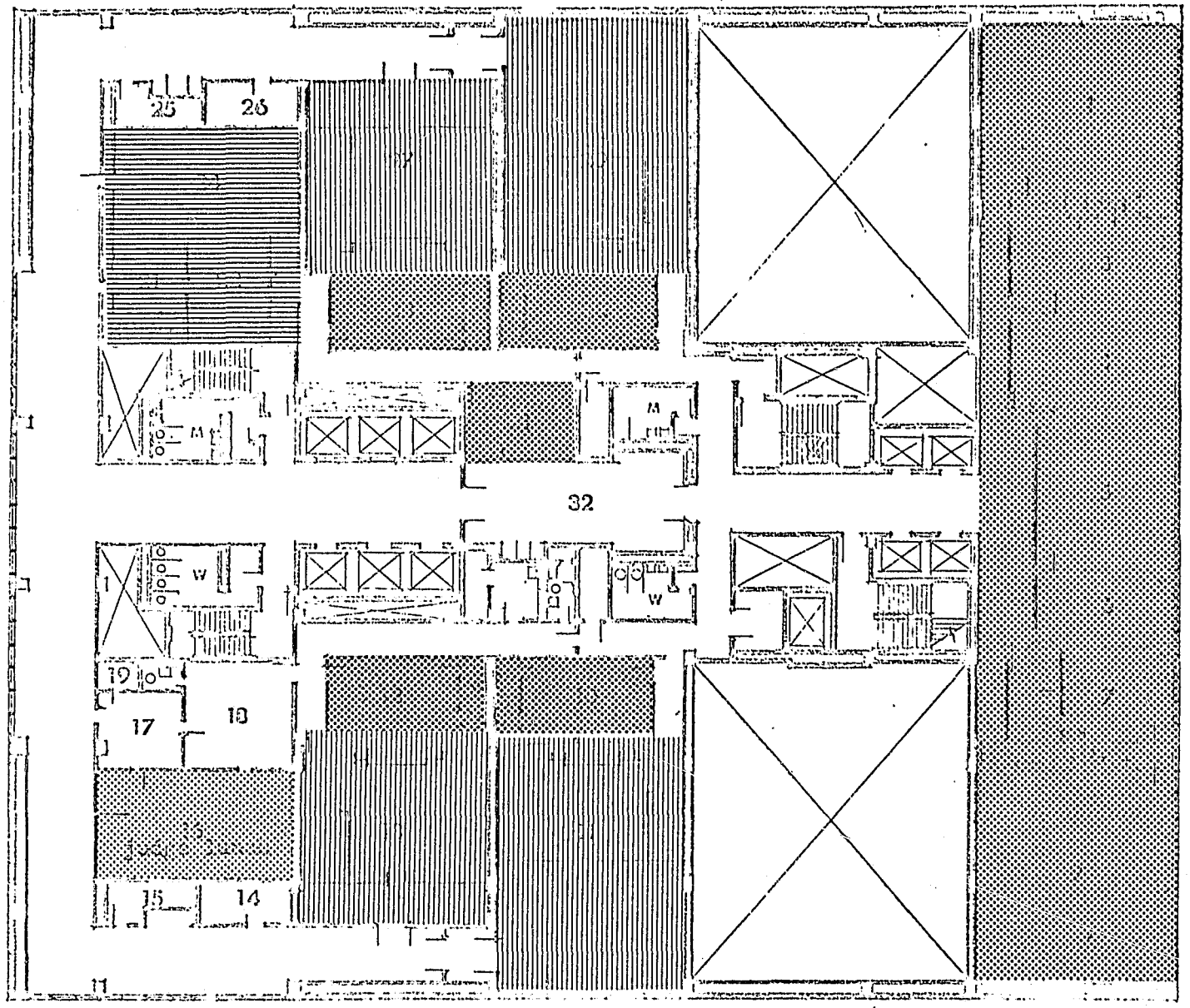
TENTH FLOOR



10 0 20 40 FT.
SCALE

K-13

ELEVENTH FLOOR



Admin. Judge

10 0 20 40 FT.
SCALE

K-14

TWELFTH FLOOR

AREA ANALYSIS: CIVIL COURT BUILDING, 111 CENTRE STREET

Floor	Gross Area (sq.ft.)	Net Functional Area (sq.ft.)	Functional/Gross (per cent)
Cellar	34,000	10,500	30.9
1	29,460	14,005	47.5
2	22,980	12,595	54.8
3	34,000	16,839	49.5
4	29,000	13,175	45.4
5	34,000	17,295	50.9
6	29,000	12,118	41.8
7	34,000	17,625	51.8
8	29,000	13,909	48.0
9	34,000	15,328	45.1
10	29,000	13,987	48.2
11	34,000	16,466	48.4
12	29,000	13,308	45.9
Fan Room	20,100	-	
Penthouse & Machine Rooms	12,150	-	
Totals	Gross	Usable	
50 courtrooms	433,690	187,150	43.2

Appendix L

EXISTING SPACE USE PLANS
OLD COUNTY COURTHOUSE, 52 CHAMBER STREET

Appendix L
PRELIMINARY ANALYSIS AND EXISTING SPACE USE PLANS
OLD COUNTY COURTHOUSE, 52 CHAMBER STREET

Problems

The building is structurally sound and with proper maintenance will last for many years. There are, however, several problems related to its use as a court facility.

1. There are no fire stairs, only open stairs in open wells. It may be possible to erect one fire stair in the same central location as the elevators. Special provisions should be made by the Public Works Department regarding fire proofing.

2. The two public elevators are encased in an open metal grilled shaft which is not fireproop but it is possible to fireproof this shaft. The other elevator for judges is fully encased in a masonry shaft.

3. The roof is leaking in parts and this will have to be repaired. When repaired, some internal work will be necessary such as repainting the rooms and repairing the flaked ceilings and walls in two or three of the rooms.

4. To improve the acoustical quality of the courtroom, a system of loudspeakers should be installed.

5. There seems to be a shortage of power in the building for air conditioning. There are at least 17 window air conditioning units on half of the second floor. A control unit was installed for those units. Similar units can be installed on the other half of the second floor and on the third floor without excessive expenditure.

Space Utilization

Each of the main floors of 52 Chambers (floors B, 1, 2, 3, and 5) has a gross of approximately 34,500 sq. ft. and a net of about 16,000 sq. ft.

The basement is in very poor condition and is used mainly to store furniture and records. The Department of Public Works occupies one entire wing of the basement floor. A new telephone panel has recently been installed in the basement for the Mayor's office. The entire basement requires a major clean-up. The structure is sound, but the lighting can be improved.

Almost the entire first floor, with the exception of two spaces occupied by the City Council and one by the Correction Department as a detention facility, accommodate parts of the Mayor's office, including the chief clerk's office, office of inter-governmental relations, Offices of Legislative Representatives, IBM Computer printing, keypunch and zerox office and the Mayor's mail rooms. The rotunda on the ground floor is most impressive. Most of the offices are well renovated and in good working condition. New Lighting has been installed and the structure is sound.

There are only two courtrooms in use on the second and third floors. It is anticipated that these two parts, 6 and 7, will soon be consolidated and moved to 346 Broadway, leaving all courtrooms unused. On these two floors, there are at least twenty rooms that can be used as courtrooms and two rooms as clerk's offices. Each floor can accommodate ten courtrooms, five on each end of the rotunda, with a large office space to be used as the clerk's office. This arrangement is particularly ideal for the MAP operation which is being implemented in the Criminal Court Building. Each group of five courtrooms is arranged so that a central courtroom is surrounded on three sides by the four courtrooms. The central courtroom can be used as the calendar courtroom, with the four peripheral courtrooms as back-up Parts. In addition, the original design of of the building allows for ample waiting spaces outside the courtroom. Such space can be used for the installation of the information communication system to inform the public of the cases to be heard in a chronological order for each MAP unit.

With the exception of two or three courtrooms that are badly flaked due to a leaking roof and poor maintenance, the rooms are

in very good operating condition. Most of them are fully equipped with judge's bench, witness box, jury box and public seating, etc. The structure is sound and the architecture is very impressive. Acoustically, the large room may present some echoing problems, but this can easily be remedied by the installation of a system of loudspeakers. The lighting is reasonable, but it is envisaged that supplementary lighting will be necessary. There are adequate toilet facilities on all floors for both men and women.

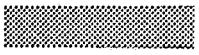
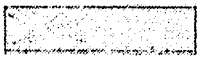
Each of the two main floors has a mezzanine floor with a series of smaller rooms suitable for use as judge's chambers, jury rooms, robing rooms and toilets. The third floor mezzanine has four corner rooms, each accessible by a separate stair from the third floor. These rooms are ideal for jury rooms.

On the fourth floor are several large record storage spaces as well as several renovated spaces, including a kitchen, which were used by a veteran's organization. This space would be suitable for judges' chambers. Most of the records on this floor are closed traffic cases, and should be either microfilmed or destroyed. With some imaginative renovation, this floor could accommodate many spacious judges' chambers.

The fifth floor is occupied by old unused air-ventilating equipment, tank rooms, fan rooms as well as file and record storage space. Due to the very irregular ceiling height and exposed ducting, this space cannot be used for anything but record and equipment storage.

PRESENT USEABLE AREAS BY DEPARTMENT

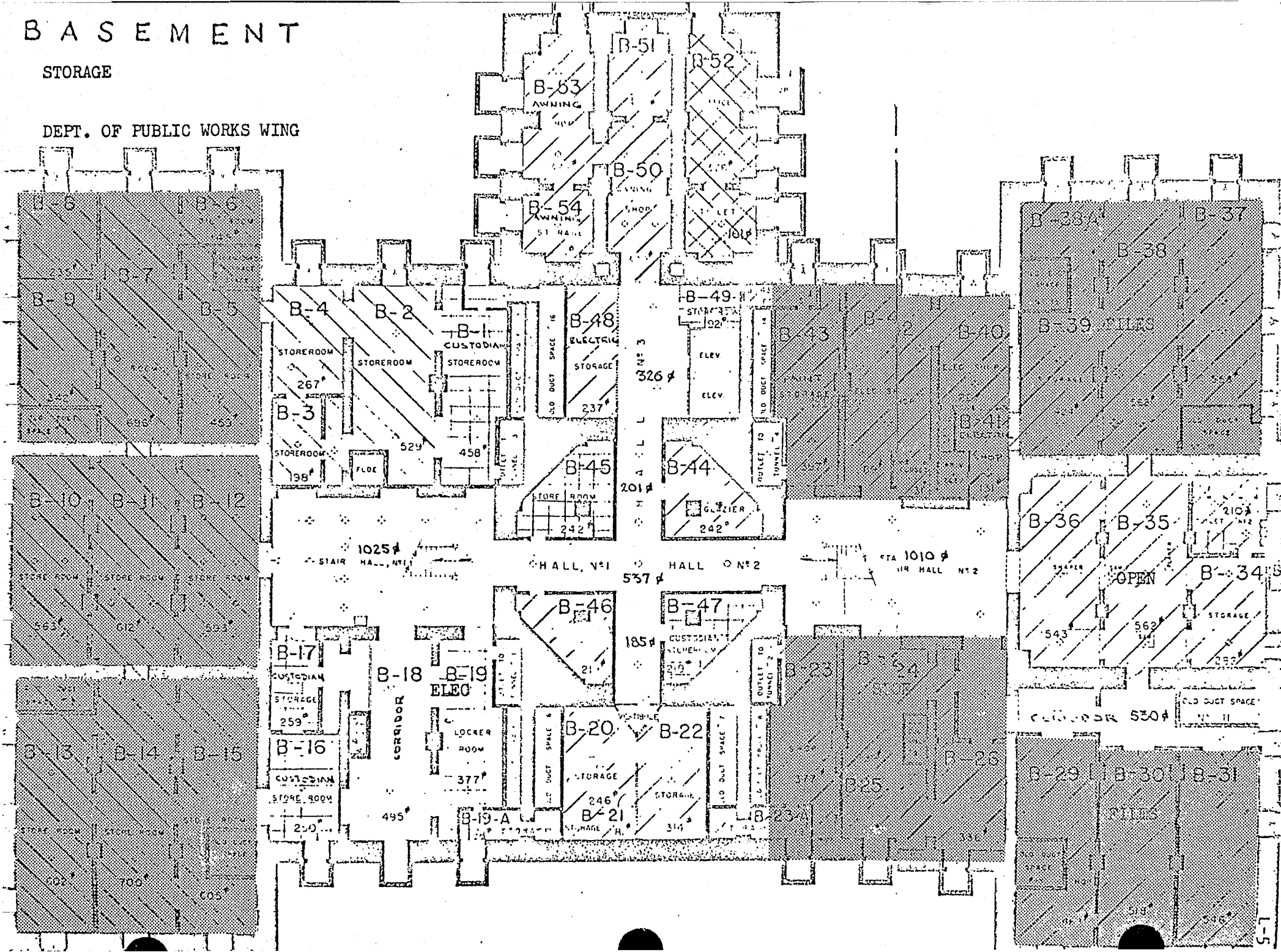
52 CHAMBERS ST.

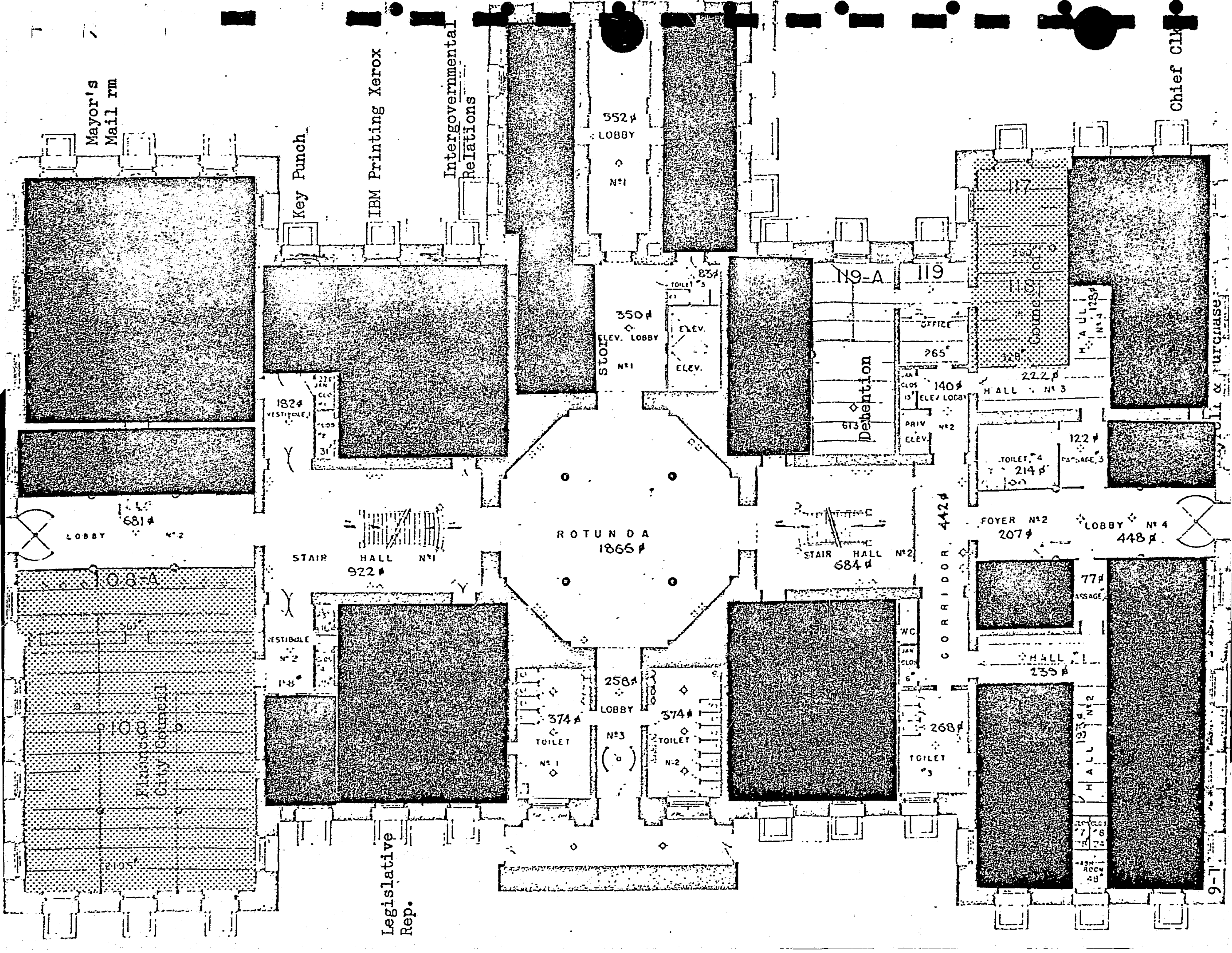
L	Storage	
2	Clerical	
3	Court room	
4	Mayor's Offices	
5	City Counsel	
6	Judge's Chambers	

BASEMENT

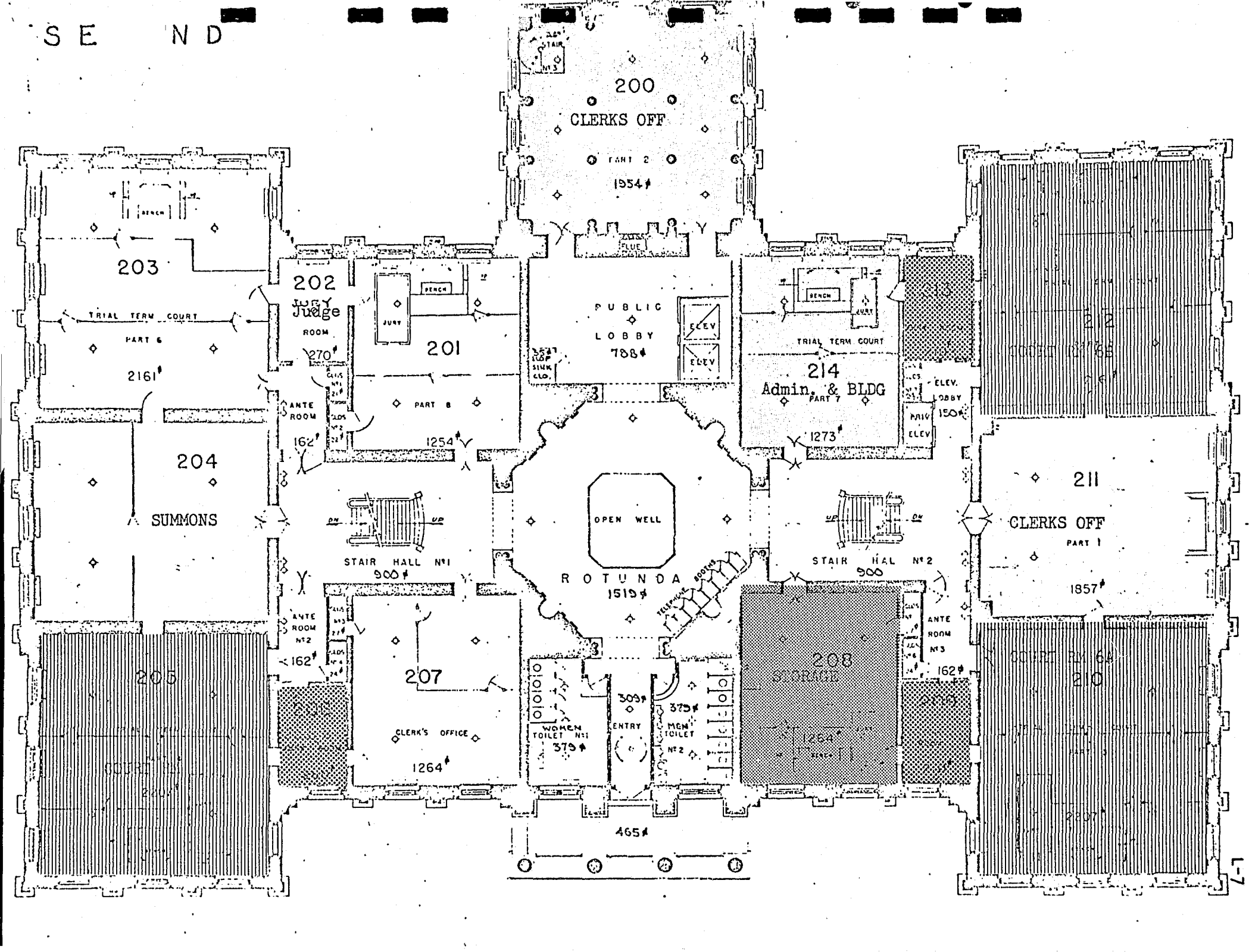
STORAGE

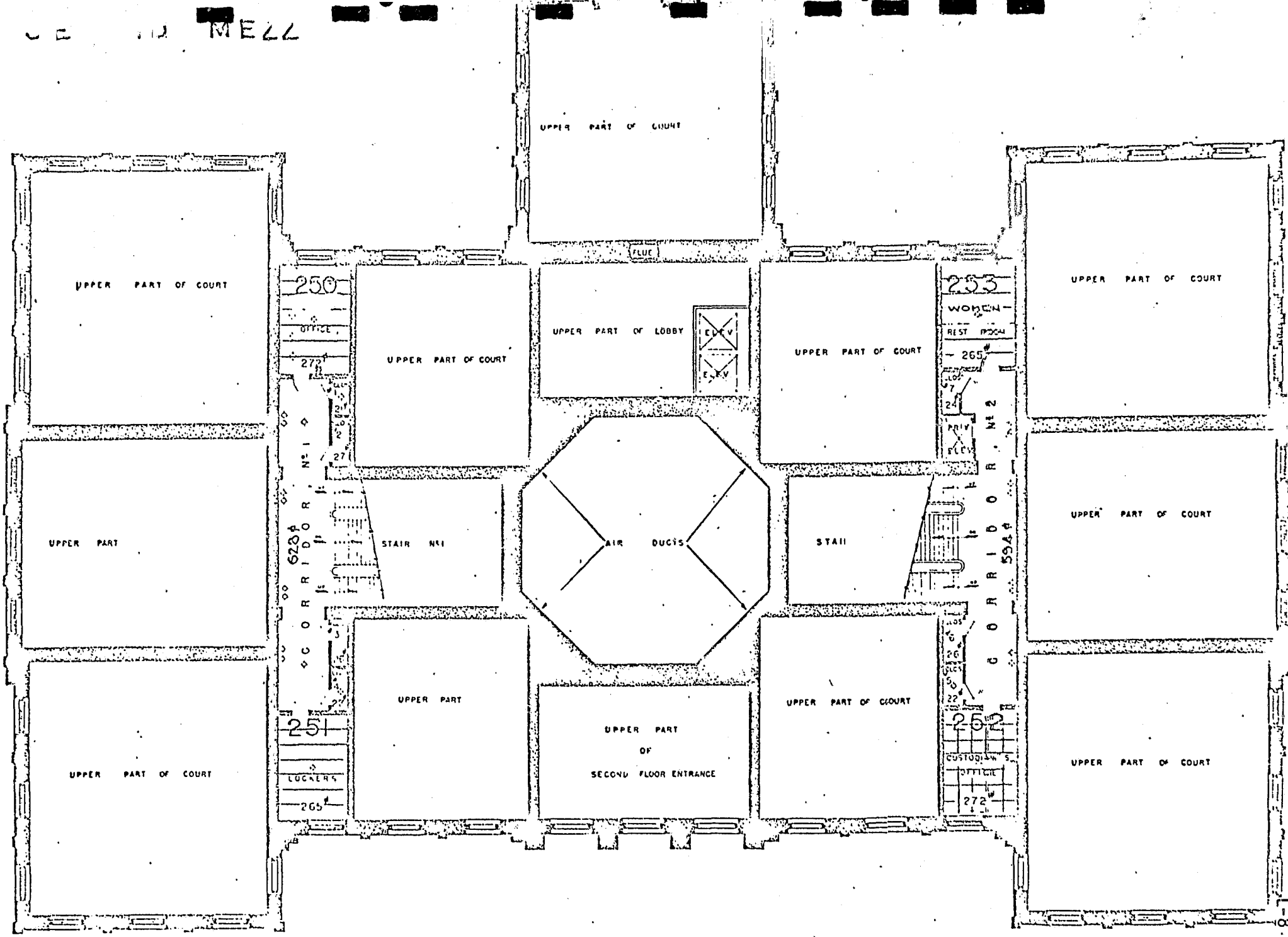
DEPT. OF PUBLIC WORKS WING





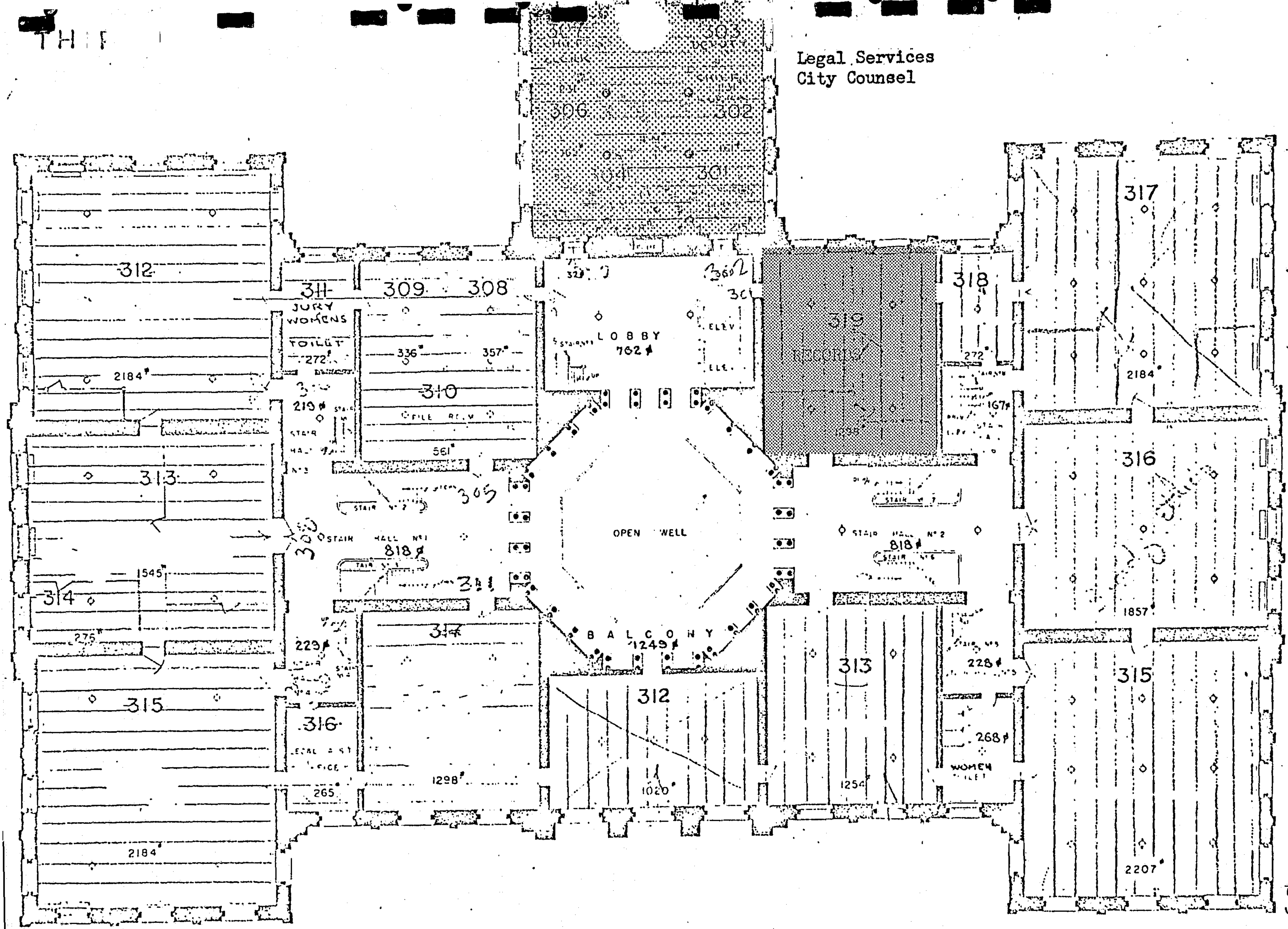
Mayor's Mail rm
Key Punch
IBM Printing Xerox
Intergovernmental Relations
Chief Clk
552 LOBBY No1
350 ELEV. LOBBY No1
ELEV.
ELEV.
TOILET 5
83
119-A
119
117
118
OFFICE
265
Detention
613
140 ELEV LOBBY No2
PRIV ELEV.
222 HALL No3
122 PASSAGE 3
TOILET 4 214
182 VESTIBULE 1
681 LOBBY No2
STAIR HALL No1 922
ROTUNDA 1865
STAIR HALL No2 684
CORRIDOR 442
FOYER No2 207
LOBBY No4 448
77 PASSAGE
HALL 1 235
108-A
VESTIBULE No2
258 LOBBY No3
374 TOILET No1
374 TOILET No2
268 TOILET 3
WC
HALL No2
WASH ROOM
Legislative Rep.

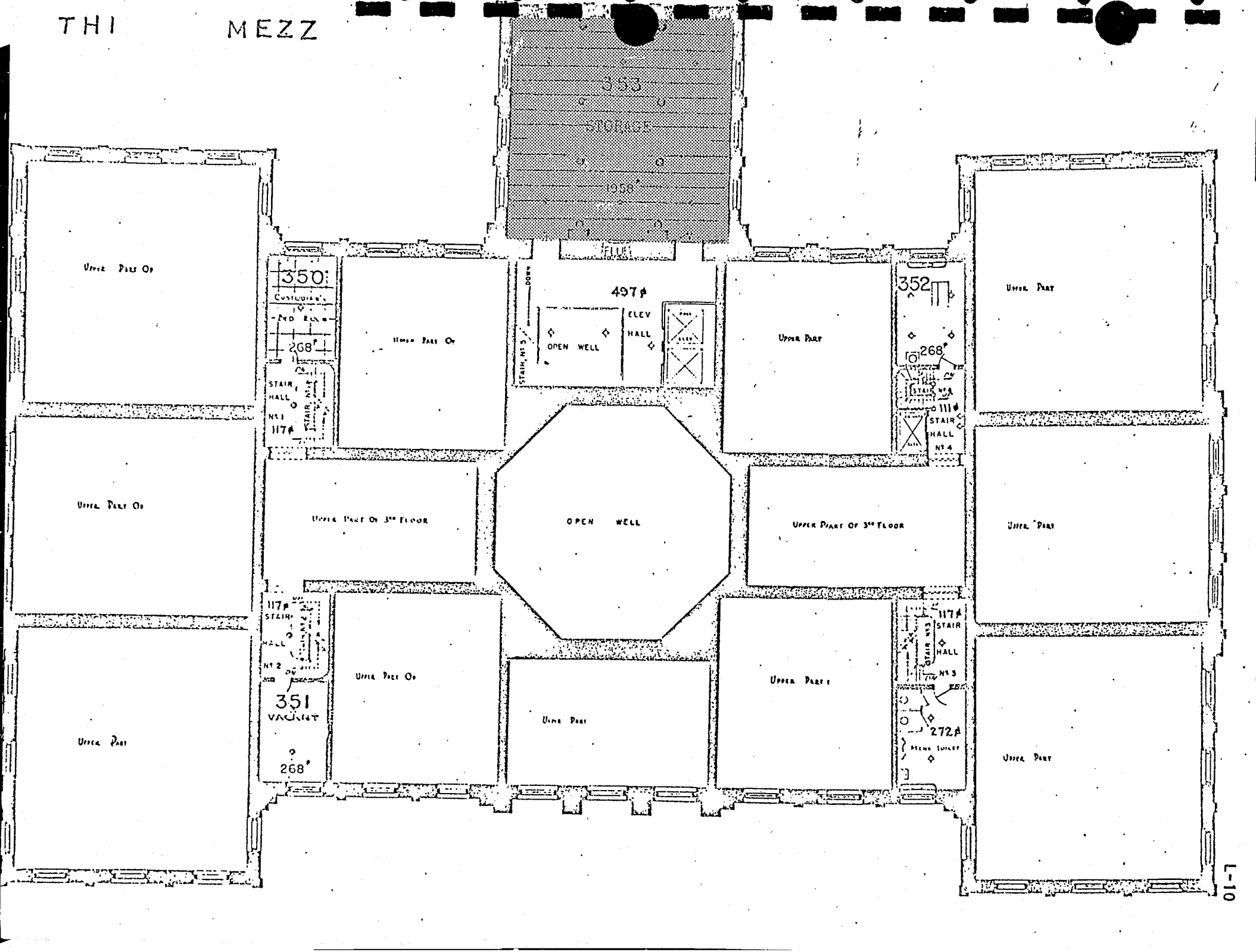

SE ND
200
CLERKS OFF
PART 2
1954#
203
TRIAL TERM COURT
PART 6
2161#
202
Judge
ROOM
270#
201
PART 8
1254#
PUBLIC
LOBBY
788#
214
Admin. & BLDG
PART 7
1273#
TRIAL TERM COURT
211
CLERKS OFF
PART 1
1857#
204
SUMMONS
ANTE ROOM
162#
STAIR HALL Nº1
900#
OPEN WELL
ROTUNDA
1519#
STAIR HALL Nº2
900
205
207
CLERK'S OFFICE
1264#
WOMEN TOILET Nº1
379#
ENTRY
309#
MEN TOILET Nº2
375#
208
STORAGE
1264#
ANTE ROOM Nº2
ANTE ROOM Nº3
162#
210
465#
L-7


UPPER PART OF COURT
FLUE
250
OFFICE
272
UPPER PART OF COURT
UPPER PART OF LOBBY
ELEV
ELEV
UPPER PART OF COURT
253
WOMEN
REST ROOM
265
LOCKERS
7
24
PRIV
FLEV
UPPER PART OF COURT
UPPER PART OF COURT
UPPER PART
STAIR No 1
AIR DUCTS
STAIR
CORRIDOR No 1
623
CORRIDOR No 2
594
UPPER PART OF COURT
UPPER PART
UPPER PART OF COURT
UPPER PART
OF
SECOND FLOOR ENTRANCE
UPPER PART OF COURT
251
LOCKERS
265
252
CUSTODIAN'S
OFFICE
272
UPPER PART OF COURT
UPPER PART OF COURT

TH I [redacted]

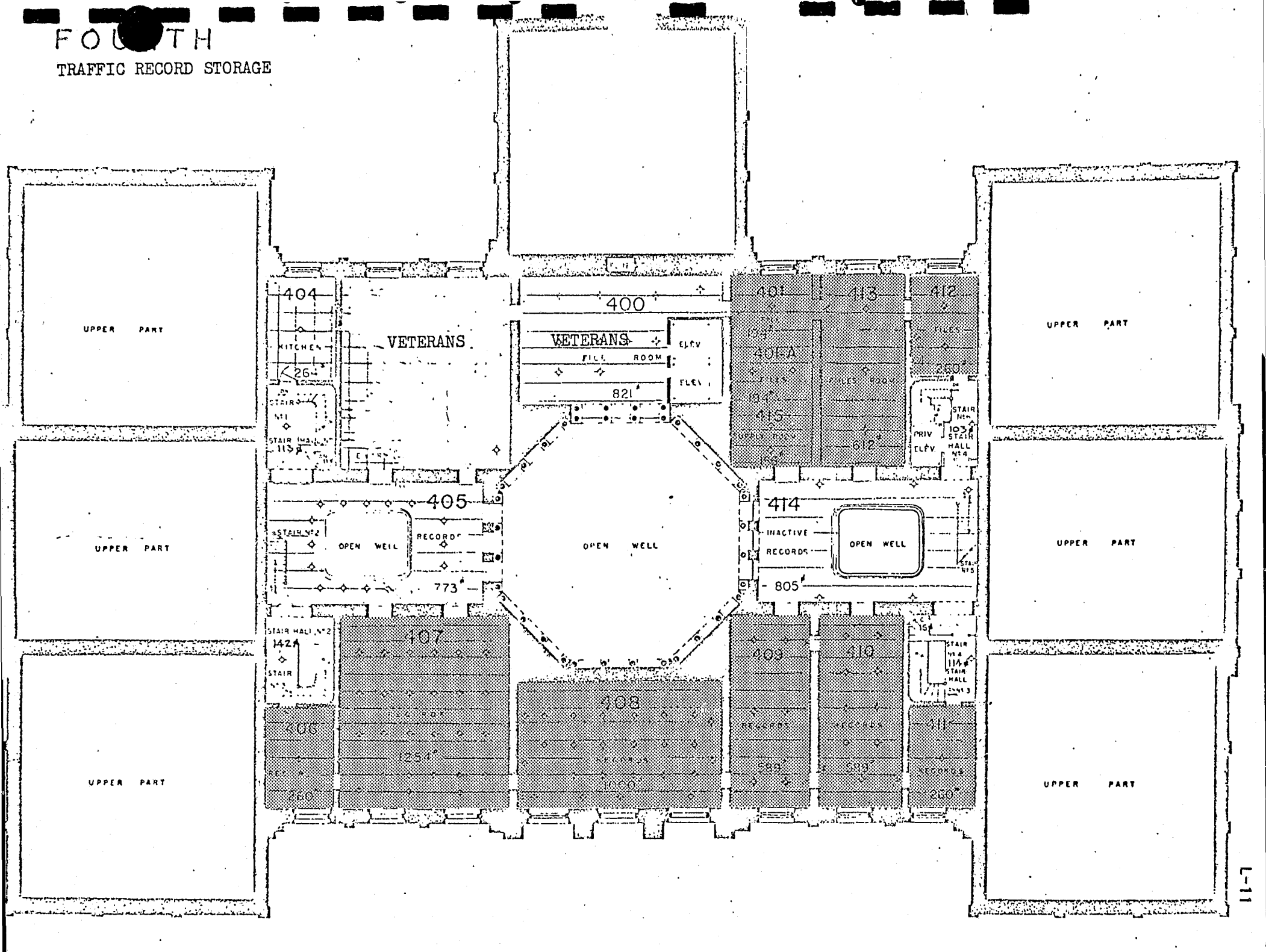
Legal Services
City Counsel




THI
MEZZ
353
GALLERY
1058
FLUE
350
CUSTODIAN'S
268
STAIR HALL NO 1
117
STAIR NO 1
UPPER PART OF
497
OPEN WELL
ELEV
HALL
STAIR NO 5
DOWN
UPPER PART OF
352
268
STAIR NO 4
111
STAIR HALL NO 4
UPPER PART
UPPER PART OF
UPPER PART OF 3RD FLOOR
OPEN WELL
UPPER PART OF 3RD FLOOR
UPPER PART
117
STAIR HALL NO 2
351
VACANT
268
UPPER PART OF
UPPER PART
UPPER PART
117
STAIR HALL NO 3
STAIR NO 3
272
UPPER PART
UPPER PART
L-10

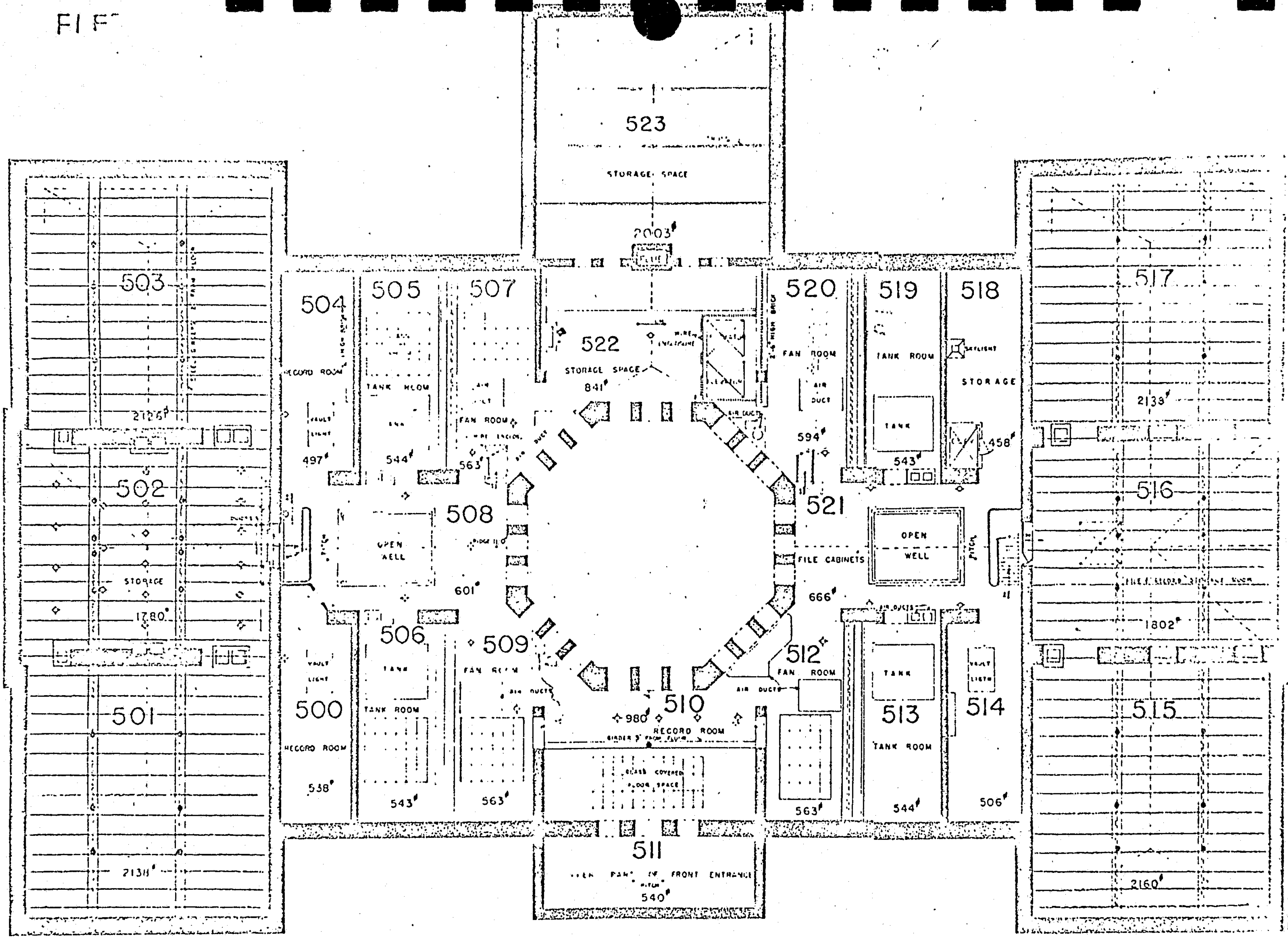
FOURTH

TRAFFIC RECORD STORAGE



L-11

FI F


523
STORAGE SPACE
2003
503
2126
502
STORAGE
1780
501
2138
504
RECORD ROOM
497
505
TANK ROOM
544
507
FAN ROOM
563
522
STORAGE SPACE
841
520
FAN ROOM
AIR DUCT
594
519
TANK ROOM
TANK
543
518
STORAGE
458
517
2138
516
1802
515
2160
508
OPEN WELL
601
521
FILE CABINETS
OPEN WELL
666
506
TANK
TANK ROOM
543
509
FAN ROOM
AIR DUCT
563
500
RECORD ROOM
538
510
RECORD ROOM
980
512
FAN ROOM
AIR DUCT
563
513
TANK
TANK ROOM
544
514
506
GLASS COVERED FLOOR SPACE
511
FRONT ENTRANCE
540

AREA ANALYSIS: OLD COUNTY COURTHOUSE, 52 CHAMBERS STREET

Floor	Gross Area (sq.ft.)	Ceiling Height	Net Area (sq.ft.)	Functional Area (sq.ft.)	Functional Gross (per cent)
Basement	36,478	10'-6"	24,959	18,565	50.9
1	34,592	15'-4"	26,193	17,109	49.5
2	34,592	22'-9"	26,543	20,674	59.8
2nd Mezzanine	4,098		2,464	922	60.1
3	34,592	31'-9"	26,156	21,598	62.4
3rd Mezzanine	4,807		3,993	2,226	46.3
4	15,776		9,762	7,797	49.4
5	34,592		23,691	12,144	35.1
TOTAL	199,527		143,761	101,035	50.6

Appendix M

PROGRAM OFFICE ADMINISTRATION

Appendix M
PROGRAM OFFICE ADMINISTRATION

Program Team

Program Director	F. Michael Wong, Ph.D. (Arch.Sc.), B.Arch.Hons. Dip.T.C.P., A.R.A.I.A., A.R.I.B.A., M.A.P.I.
Architectural Associate	Harold Kimura, B.Sc., N.C.A.R.B., R.A.
Engineering Associate	Richard Andrianos, B.M.E., B.E.E.
Manpower Planners	Louis J. La Capra, M.S., M.A., B.S. Laurence C. Caffin, M.S., B.S. Paul Segaline, B.A.
Architectural Assistant	Stephen Metsch, B.Arch., B.S.
Architectural Designers	Steven Weinstein, M.Arch., B.Arch. Paul J. Tripodi, B.Arch., B.A.
Administrative Assistant	Dori Dressander, B.A.
Secretary	Janet Grandinetti, B.A.
Typist	Deborah Madison, B.A.

Staff

The Port of New York Authority's Personnel Department has provided the Program with manpower planners to predict the personnel requirements for the Criminal Court Building and Criminal Division of the Supreme Court over the next 30 years. This work will be completed by the end of February 1971. Predictions for the entire Foley Square area will be completed by September 1971. Mr. Laurence Caffin, a senior member of the Manpower Planning Unit, will spend about one-fourth time on the program, and Mr. Paul Segalini, assigned on a mobility basis, will spend almost full time. Mr. Louis La Capra, head of the Manpower Planning Unit, will supervise their work, under the direction of the Program Director.

Mr. Richard Andrianos joined the program as the Engineering Associate on November 5, replacing Mr. Kenneth Lewison who left the program to go into the real estate business. Mr. Andrianos

has degrees in Electrical and Mechanical Engineering. He will study the court buildings' existing mechanical and electrical systems and equipment and evaluate and recommend new and supplementary systems and equipment.

Equipment and Supplies

With the addition of the following equipment and supplies, the program offices are now complete:

Partitions for ninth and tenth floor offices in the Civil Court Building (installed by contractors through the Department of Public Works).

Power outlets (installed by the staff of the Department of Public Works).

Telephones - four new lines, eight telephones.

IBM Selectric Composer (six-month rental only).

Magnetic and cork boards.

Fifteen units of 4 ft. x 7 ft. bookshelves.

Plan files.

Two secretary's desks.

Conference table.

Blue-ray printing machine.

Executive chair.

Desk extension units.

Letterhead stationery.

END