



**LIBERTY MEMORIAL BUILDING • STATE LIBRARY COMMISSION**



# **LIBERTY MEMORIAL BUILDING**

**A PROPOSAL FOR  
RESTORATION AND  
RENOVATION FOR THE  
STATE LIBRARY**

**ARTHUR A. LINK, GOVERNOR**

**EDWARD KLECKER  
DIRECTOR OF INSTITUTIONS**

**RICHARD J. WOLFERT  
STATE LIBRARIAN**

**PUBLISHED BY:  
STATE LIBRARY COMMISSION  
BISMARCK, ND**

**TVENGE-LARSON  
ARCHITECTS AND PLANNERS  
BISMARCK, ND**

**SCHMIT, SMITH & RUSH  
MECHANICAL & ELECTRICAL  
ENGINEERS  
MINOT, ND**

**LOOS & TRAEHOLT  
STRUCTURAL ENGINEERS  
BISMARCK, ND**

## **TABLE OF CONTENTS**

2. PREFACE
2. FEASIBILITY STUDY
2. HISTORY
3. TIE-IN TO HERITAGE  
CENTER
3. STATE LIBRARY  
COMMISSION
4. SITE PLAN
5. CODES
5. STRUCTURAL
6. MECHANICAL
6. ELECTRICAL
7. LIBERTY MEMORIAL  
BUILDING STATE LIBRARY
8. SUB-BASEMENT 1979
9. SUB-BASEMENT 1981
10. GROUND LEVEL 1979
11. GROUND LEVEL 1981
12. FIRST LEVEL 1979
13. FIRST LEVEL 1981
14. SECOND LEVEL 1979
15. SECOND LEVEL 1981
16. THIRD LEVEL 1979
17. THIRD LEVEL 1981
18. SQUARE FOOTAGE TOTALS
18. REMODELING COSTS

North Dakota State Library  
Bismarck, ND 58505

**SEPTEMBER 1, 1978**



## PREFACE

**"A Concurrent Resolution Recommending that the State Library Commission be moved to the Liberty Memorial Building once the Liberty Memorial Building is no longer occupied by the State Historical Board,"** states Concurrent Resolution No. 4002 of the Forty-fifth legislative session concerning the future of the elder statesman of North Dakota Capitol Ground's Buildings. The resolution goes on to urge the Director of Institutions to apply for preplanning funds for the preplanning necessary to determine the extent of remodeling required for the occupation of the Liberty Memorial Building by the State Library.

The text that follows is a report on that preplanning work completed prior to this forty-sixth legislative session. The report deals with those issues that are either of a maintenance nature to the Liberty Memorial Building or of a functional nature to the State Library; specifically, those issues or items that result in construction.

## FEASIBILITY STUDY

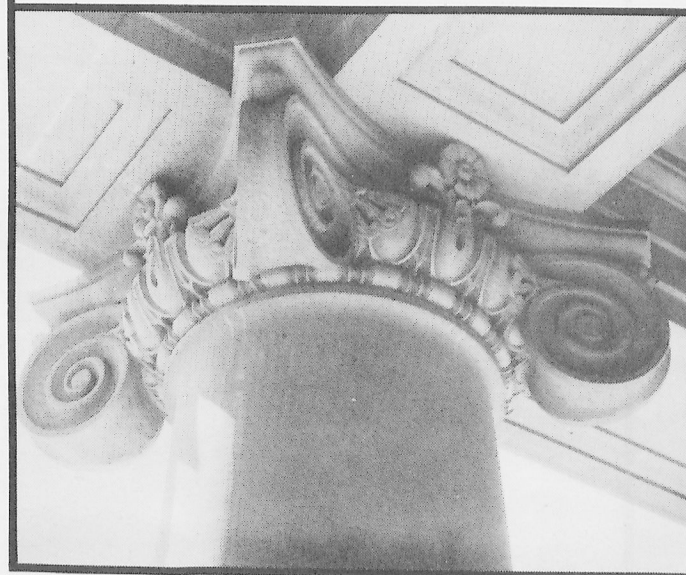
Contracted by the Director of Institutions office, the architectural and planning firm of Tvenge-Larson undertook the feasibility study. The study centered around the ability to define two major items; namely, the qualities, quantities, and capabilities of the Liberty Memorial Building and the present/future spatial and functional needs of the State Library. With these items formally established, the meshing of the two to determine compatibility can happen. The preceeding is a gross exaggeration of the simplicity of such a study; since so many other related factors must be considered to ascertain a completely reliable conclusion. Not only were the rooms and spaces measured for size, but also, a detailed review of relevant building, handicap,

and energy codes were undertaken, and a complete structural analysis was provided. A series of consultations and site plan analyzations with the Heritage Center Architects were completed to determine the Liberty Memorial Building's suitability as a backdrop and partner in the Heritage Center Plaza. These were lengthy discussions with the State Historical Society and other preservationists concerning the preservation objectives surrounding the Liberty Memorial Building. Also investigated was adaptive use, including a detailed study of the building's existing mechanical and electrical systems with regard to their possible reuse, modification or addition to, and finally, the evolution of plans for the State Library's habitation of the Liberty Memorial Building and anticipated construction costs.

## HISTORY

The Liberty Memorial Building was built over a four year period spanning the years 1920-1924 to alleviate the spatial cramps which the old capitol building had been experiencing and also to mark the end of World War I. Undertaken by the North Dakota architectural firm of Keith & Kurke, the Liberty Memorial Building is indicative of federal-type buildings of this time in that it is designed in the Classical Style of architecture.

Initially the building housed the Supreme Court, the Adjutant General, The State Historical Society and the Library Commission. Through the 1960's, the building housed the State Historical Society and the State Library Commission. In 1970 the State Library moved to leased space in the Randal Building. Presently the building is occupied by the State Historical Society and the Central Microfilming Service of the Secretary of State's Office.





## TIE-IN TO HERITAGE CENTER

Primary to the visual eye is the relationship of the new Heritage Center to the Liberty Memorial Building and conversely any changes in the Liberty Memorial to the Heritage Center.

Upon close inspection the general condition of the Liberty Memorial becomes apparent; **there is a 55 year coating of dirt and grime, severely corroded masonry joints and windows that have rusted from ill-keep and condensation.**

These conditions call for a cleaning of the limestone so that the Liberty Memorial Building will again present the appearance of Limestone similar to that used on the other capitol grounds buildings. The tuck-pointing of masonry joints with new mortar to stop leaking and structural deterioration and the repair or replacement of the windows is also indicated. With these repairs, the building's exterior will be secure for a great many years. Primary to the New Heritage Center will be the center's plaza and the fact that the Liberty Memorial Building forms the west border of the plaza. The focal point of the Heritage Center plaza will be a fountain, it is this fountain that will serve as a screen for the Liberty Memorial Building's delivery entrance, cooling tower, and the handicapped employee parking for the Liberty Memorial Building and the Heritage Center.

The cooperation necessary to construct a plaza providing the above mentioned amenities has been established; and even though the construction times are not concurrent, arrangements have been made to allow for construction in mid-1980 without disruption of the Heritage Center Plaza.

Since the Heritage Center Plaza is at the same elevation as the ground floor of the Liberty Memorial Building, no special problems are anticipated in allowing pedestrian access to the Liberty Memorial Building.

## STATE LIBRARY COMMISSION

Established in 1907 as the Public Library Commission, the agency consisted of three persons, two of which were ex-officio.

Since 1907 the State Library Commission has been a function of many different groups, namely the Board of Administration from 1919 to 1969. Beginning in 1969 the Director of Institutions became the State Library Commission. There is also a Governor's Advisory Council on Libraries, which advises on statewide programs of library development and coordination.

The State Library presently rents space in the lower level of the Randal Building on Highway 83 North of Bismarck; where it requires 10,820 square feet to house its 80,000 volumes, 14,000 tape cassettes, 2,000 filmstrips, various periodicals and other library materials. This rental space has become less sufficient as the collections continue to expand and services to local libraries continue to develop. Presently staffed by 25 people the State Library provides the following essential services:

- Statewide Library and Information Service by mail, telephone and in person.
- Interlibrary cooperation, union catalog of statewide materials, teletype network for rapid search of materials, and member of special library planning committees across the state.
- Library services to State Government.
- Collect Material of concern to:
  - State Government
  - Legislators
  - State Employees
- State document depository system.
- Publish Constitutional Convention books.
- Provide computerized cataloging system for certain state agency library collections.

- Retain back files of selected books and periodicals.

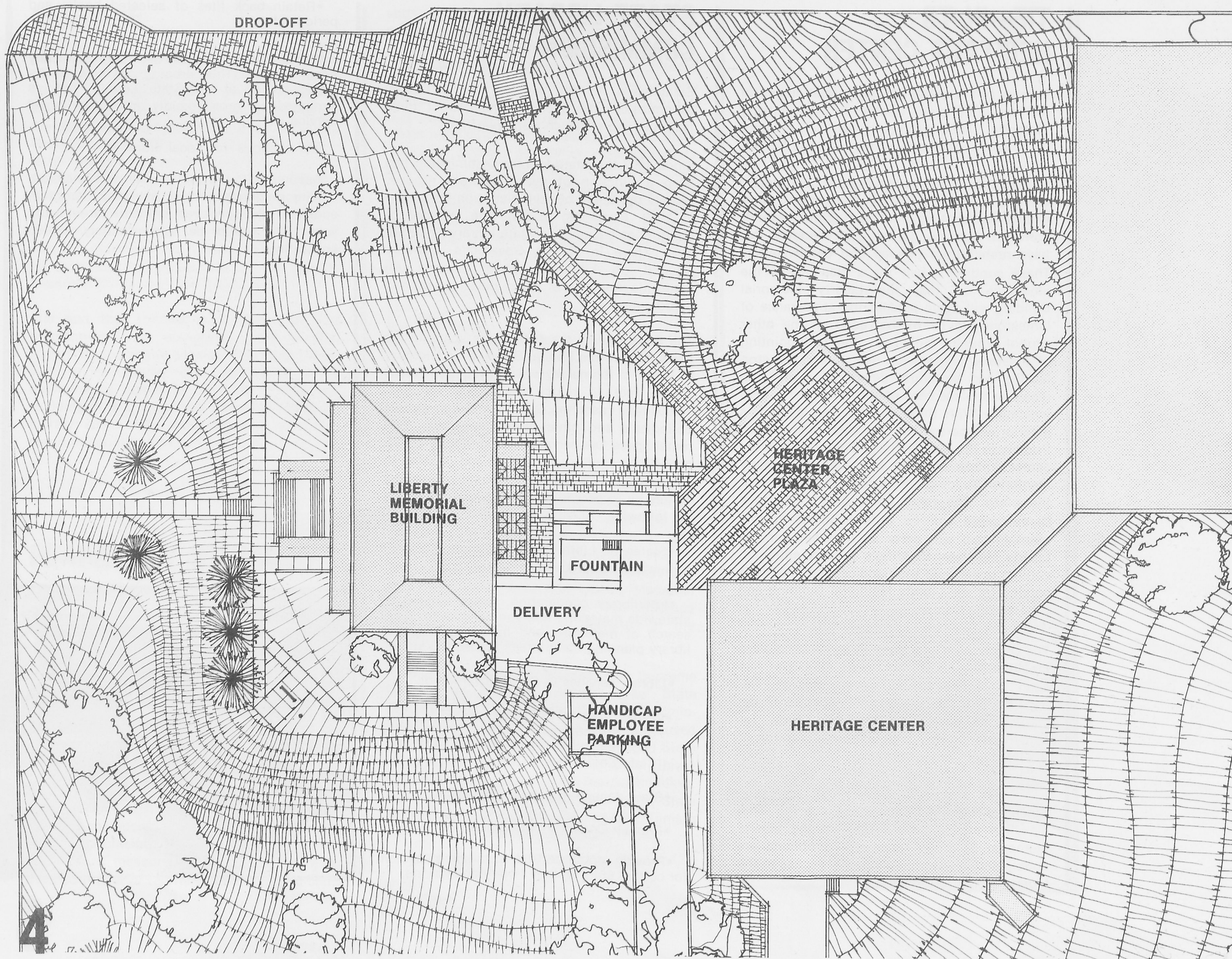
- Library Services to the blind and physically handicapped: (This program is now in its infant stages at the State Library, but, is expected to grow rapidly into a principal service.)

- Workshops for local libraries.

Assuming the State Library will maintain similar programs without any major program additions; **the space requirements through the year 1988 would be approximately 28,000 square feet.**







DROP-OFF

LIBERTY  
MEMORIAL  
BUILDING

FOUNTAIN

DELIVERY

HANDICAP  
EMPLOYEE  
PARKING

HERITAGE  
CENTER  
PLAZA

HERITAGE CENTER



## CODES

Building Code Requirements have changed drastically since 1920, consequently a thorough code investigation was undertaken to determine those areas that, because of the potential remodeling, would require modification to meet these codes. Applicable codes are the Uniform Building code, the North Dakota Energy Code and several national and state mechanical and electrical codes.

The Liberty Memorial Building is a very substantially constructed building affording a fireproof building classification; the fireproof building construction makes it unnecessary to provide any other fire protection equipment outside of fire extinguishers. Given the fact that the building does not require any other fire protection, it does require some other code related modifications:

- Required to have another occupant exit from the second and third floors.

- Stairways require additional handrails and more height on other handrails.

The above items are some of what is required by the Uniform Building Code.

The North Dakota Handicap code requires:

- Handicap building access (exterior)
- Men and women handicap toilets
- Modification of other existing toilets
- Handicap access from floor to floor
- Handicap parking for visitors and employees
- Handicap drinking fountains

The provision of several of the handicap items becomes quite difficult since the current access to the building requires climbing the front or side stairs and the 1920 toilet arrangement only provided for a toilet of each gender on every other floor. To overcome these two difficulties, an entrance will be created at the ground floor level, requiring only a slight ramp down from the front of the building and after gaining access at the ground floor, a handicapped person would then have access to the entire building by way of the elevator.

Also on the ground floor will be men and women toilet rooms that will be created by demolishing a wall between an existing toilet room and a storage room and developing two toilet rooms. As with the other Capitol Grounds Buildings, the Liberty Memorial Building now becomes accessible to the handicapped.

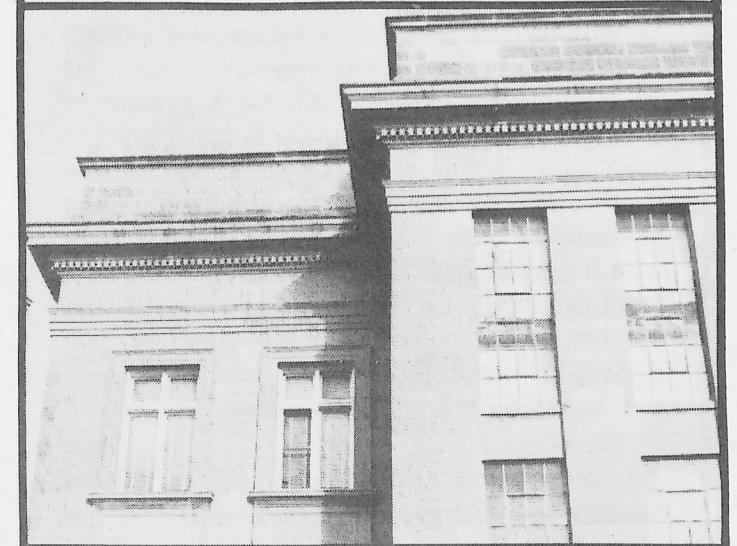
The newly enacted North Dakota Energy Code requires compliance by any building whose occupancy will change or any building that will use more fossil fuel because of either heating or cooling. Steps will be taken to reduce the heating load, but the Liberty Memorial Building has never been air-conditioned and consequently the amount of fossil fuels used is expected to increase during the air conditioning season.

The code requirements have been determined through visitations with the Superintendent of State Construction, the State Fire Marshal and the Bismarck Building Inspection Department.

## STRUCTURAL

While considering the placement of the State Library into the Liberty Memorial Building the question of where stack areas could be located became a critical issue, especially when it was **discovered that the typical load carrying capacity of the floors in the Liberty Memorial Building is between 50 and 65 pounds per square foot. This seems completely adequate, but it falls 75 pounds per square foot short of the Uniform Building Code's requirement for stack floors.** The 50 to 65 pounds per square foot will meet the requirements for an office type occupancy or reading rooms, but stack areas will need to be either in the existing stacks or in the sub-basement where the slab is on ground and capable of supporting the 125 pounds per square foot.

By utilizing the not-so-accessible existing stack area for an inactive single ward stack area, the volume capacity of the State Library in the Liberty Memorial Building will be nearly 200,000 volumes. **The 200,000 volume figure will constitute a maximum within the Liberty Memorial Building as there are no areas for stack expansion.**





## MECHANICAL

55 years old and still basically untouched, amply describes the Liberty Memorial Building's mechanical system and many other aspects of this building. Installed between 1920 and 1924 the system consisted of cast iron radiators below each window and a ventilation system that pushed air to each room via ductwork in chases running vertically in four locations. The ventilation ductwork is very sophisticated for its time but, it was only installed to provide fresh air and not the filtered and humidified air we would expect of a ventilation system in a library in 1979.

**In a library usage such as this, it is anticipated that any mechanical system would continue to heat and also cool, humidify and filter the air and building.** This will be the case; and except for reasons of preserving the interior architectural decor, it could easily be accomplished. It was determined that those floors that have this exquisite ornamentation will require the modification and reuse of the existing ventilation ductwork and window convection boxes below each window. In those areas where there is no ornate decoration or where the Liberty Memorial Building will undergo new construction, a system of new ductwork will be installed.

It has been decided, based upon the various constraints and desires for economies in both construction cost and energy, that the heating/cooling system will be a system of hydronic heat pumps. (Similar to the system in the Capitol Building). This system will provide each room or space with the required heating and cooling with room by room control. Now with the heating/cooling system installed and complemented by the modified ventilation system, the Liberty Memorial Building will provide a comfortable environment for man and books for a great many years.

Two other items of a plumbing nature will be revised; one is the leaking rain leaders at the roof, these have caused extensive plaster

damage and will require replacement or repair. Secondly, the old plumbing fixtures will be replaced to accomplish two objectives; the modification of some fixtures for handicap use and replacement because of old brass fittings and worn out fixtures. Slight modification of the connection's will be necessary but no modification of the basic plumbing drain and vent system seems to be necessary.

The heating/ventilation and air conditioning system for the Liberty Memorial Building, when complete, will sufficiently heat, cool, humidify and filter the air through the use either new or the reuse of existing equipment. The new system will also have responded favorable to the architectural context of the Liberty Memorial Building by way of its sensitive introduction into the very architecturally ornate portions of the building. The new mechanical system will represent the best thinking in the area of mechanical technology, energy conserving techniques and environmental monitoring and control.

## ELECTRICAL

Only a new service feeder from the capitol electrical vault and some new light fixtures have been added or changed since the original electrical system was installed in 1920 to 1924. Although the existing system is still workable, it does not provide for new electrical requirements that have developed in the past 55 years. It is inadequate, both in terms of power outlet capacity and recommended lighting levels.

Considering the new usage, the existing electrical system is totally inadequate and will be completely replaced with a new system that provides not only the required amount of outlets but also much more functional lighting for a library occupancy.

Given the architectural character of the Liberty Memorial Building from both the interior and exterior; the electrical system should co-exist and compliment. This will happen by modifying the existing wood base to house an electrical raceway of outlets, by restoring old light fixtures for decoration only and introducing new lighting as either general illumination or as task lighting, both complimentary of the ornate plaster, travertine and wood.

Areas of new construction will allow for more conventional power and lighting techniques but yet, they too will be in keeping with the rest of the building.

The new Heritage Center, because of its nature and display capabilities, will be illuminated at night. Also, in response, the Liberty Memorial Building should be lit at night to provide for the sense of complex and sharing as is the case with the Heritage Center Plaza. This will be accomplished from the ground with inconspicuous multi-vapor light fixtures.

Obvious, and also very critical to the new occupancy, is that the Liberty Memorial Building electrical remodeling will consist of fire alarm and telephone/intercom systems.

New heating, cooling and air-conditioning and a new electrical power, lighting and telecommunications systems will, if introduced properly, not affect the architectural character of the Liberty Memorial Building. It will enable the State Library to occupy the building in comfort, both physically and mentally, knowing that advances in programs or service techniques will not be restricted for the next 20 to 40 years.



## LIBERTY MEMORIAL BUILDING/STATE LIBRARY

The following floor plans are illustrative of two things: one set of plans shows the Liberty Memorial Building as it is now with notations concerning particular problem areas and a tabulation and roster of rooms and their sizes and the second set shows the Liberty Memorial as it would be as the State Library; including all the furniture, equipment and new room names.

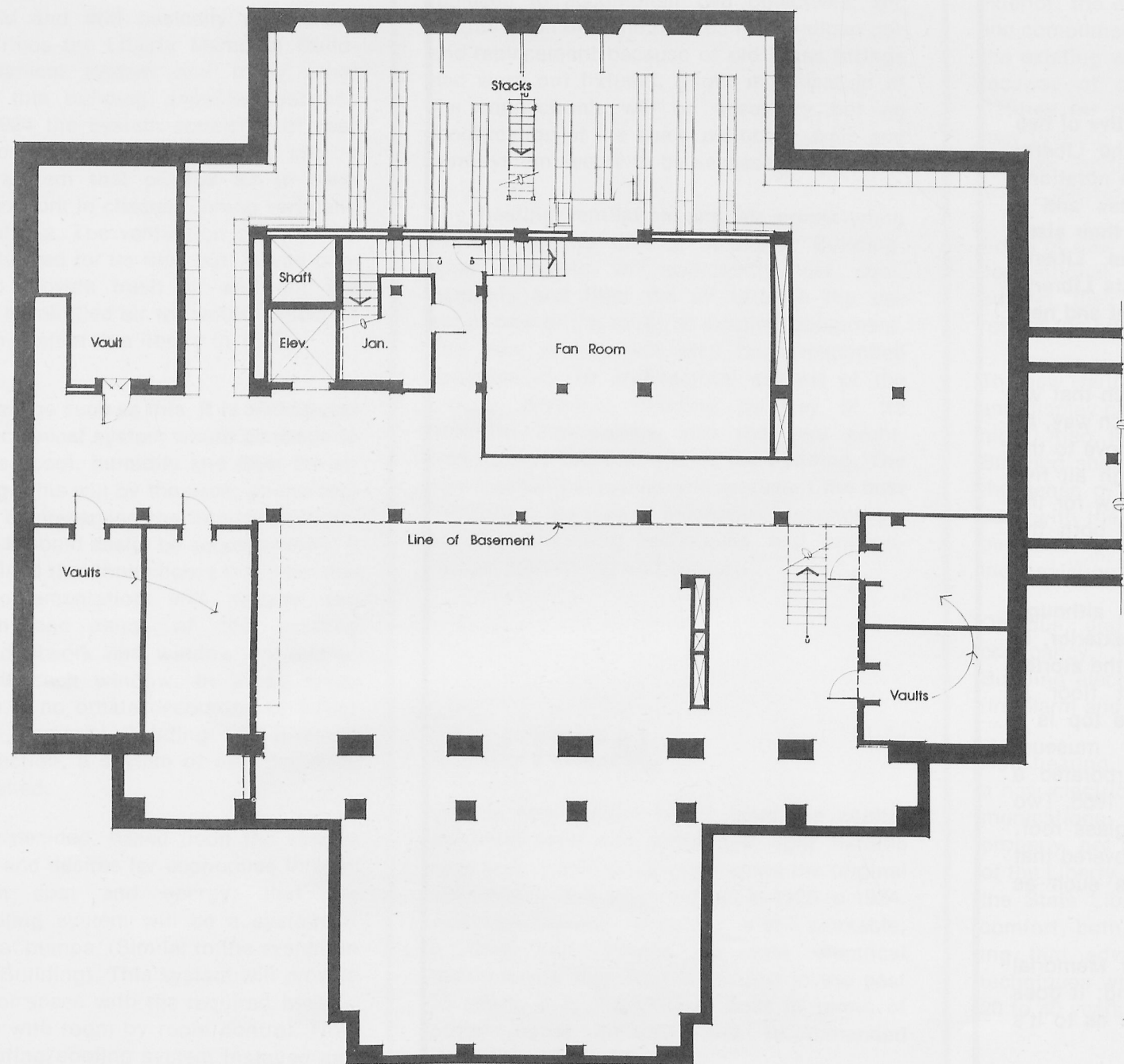
The organization of the plans is such that we start at the basement and show it each way, as it is and how it will be, and then move to the next floor above and so on through all five floors. It is hoped that this will allow for the comparison of both plans to note both the subtle and the major changes.

The Liberty Memorial Building, although almost incomprehensible from the exterior, is a five story building. Only three of the stories have windows, as the basement floor is completely below grade and at the top is a blind story. Used primarily for museum display; the blind story also incorporated a very inventive glass roof until about 1955. Two things caused the removal of the glass roof, one: it leaked, and two: it was discovered that ultraviolet light deteriorates things such as books, exhibits and art.

The fact still remains, the Liberty Memorial Building is a very deceiving building; it does little to give hints from the exterior as to its actual size.



## AREA TABULATION



Fan Room	609 s.f.
Stair/elev.	400 s.f.
Walls	791 s.f.
<b>Total:</b>	<b>1800 s.f.</b>
<b>Gross area:</b>	<b>8630 s.f.</b>
<b>Net useable:</b>	<b>6830 s.f.</b>

### CONDITIONS

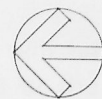
- Inadequate vaults
- Inoperable dumbwaiter
- Leaking at front steps
- Low ceilings

### DEMOLITION

- Vaults
- Floor for elevator
- Floor for structure
- Wall for door

Tvenge - Larson  
Architects / Planner

405 - East  
Bismarck, Broadway North Avenue  
Dakota



Sub-Basement

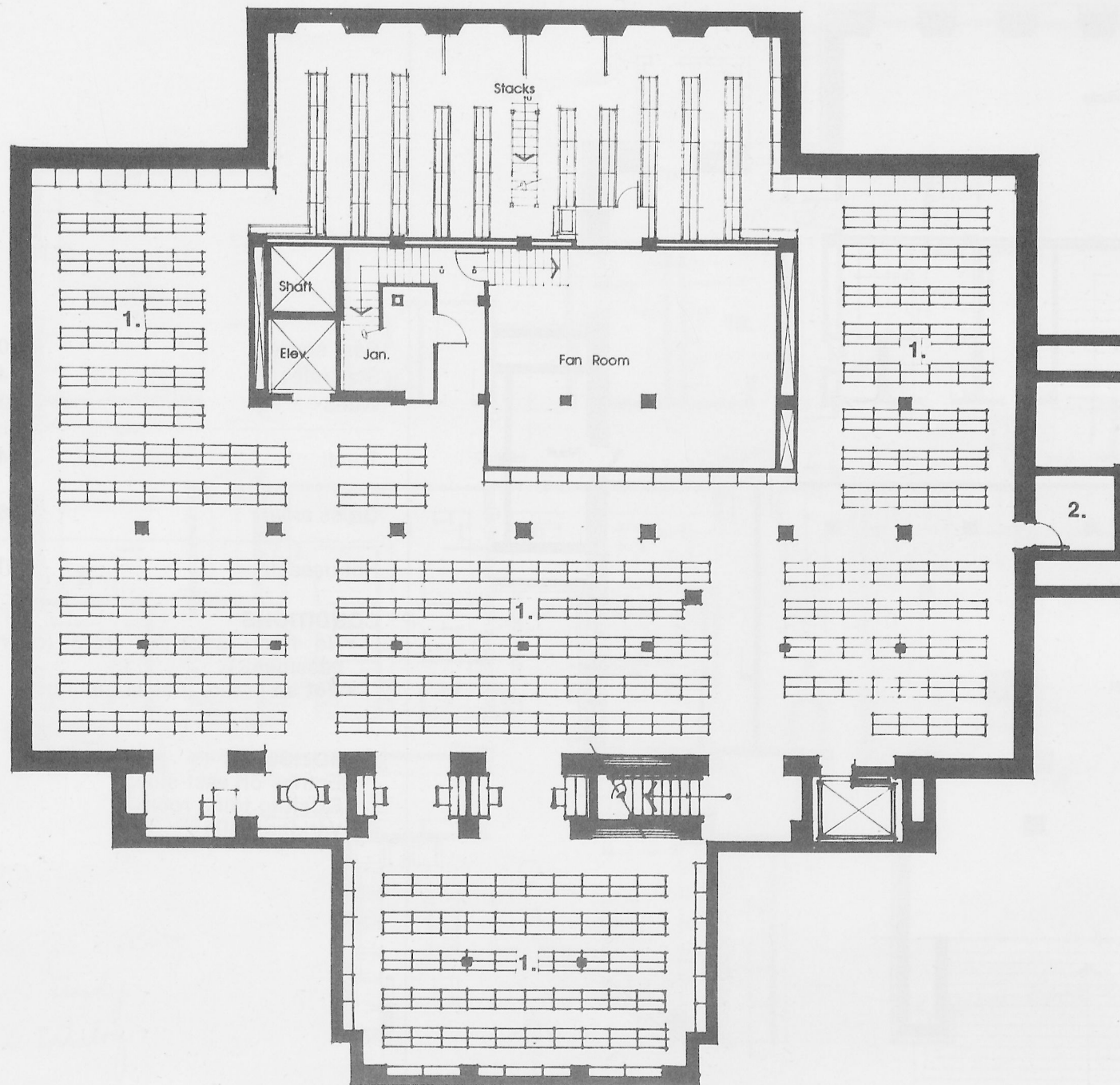
Liberty Memorial Building  
State Library Commission

State Capitol Grounds Bismarck, North Dakota

A Feasibility Study

LIBERTY MEMORIAL 1979





## ROOMS

1. Active Stacks
2. Elevator Equipment

### OUTLINE OF NEW CONSTRUCTION

- Floor filled in at two story space
- Elevator shaft
- Stairway
- Walls at elevator equipment room
- Paint walls, ceiling and floor
- New lighting

Because the floor at this level is on ground, it is very supportive of the heavy bookstacks, thus having the active stacks on a single level facilitates easier reader access.

**Tvenge - Larson**  
**Architects / Planner**

405 - East Broadway Avenue  
Bismarck, North Dakota



**Sub-Basement**

**Liberty Memorial Building**  
**State Library Commission**

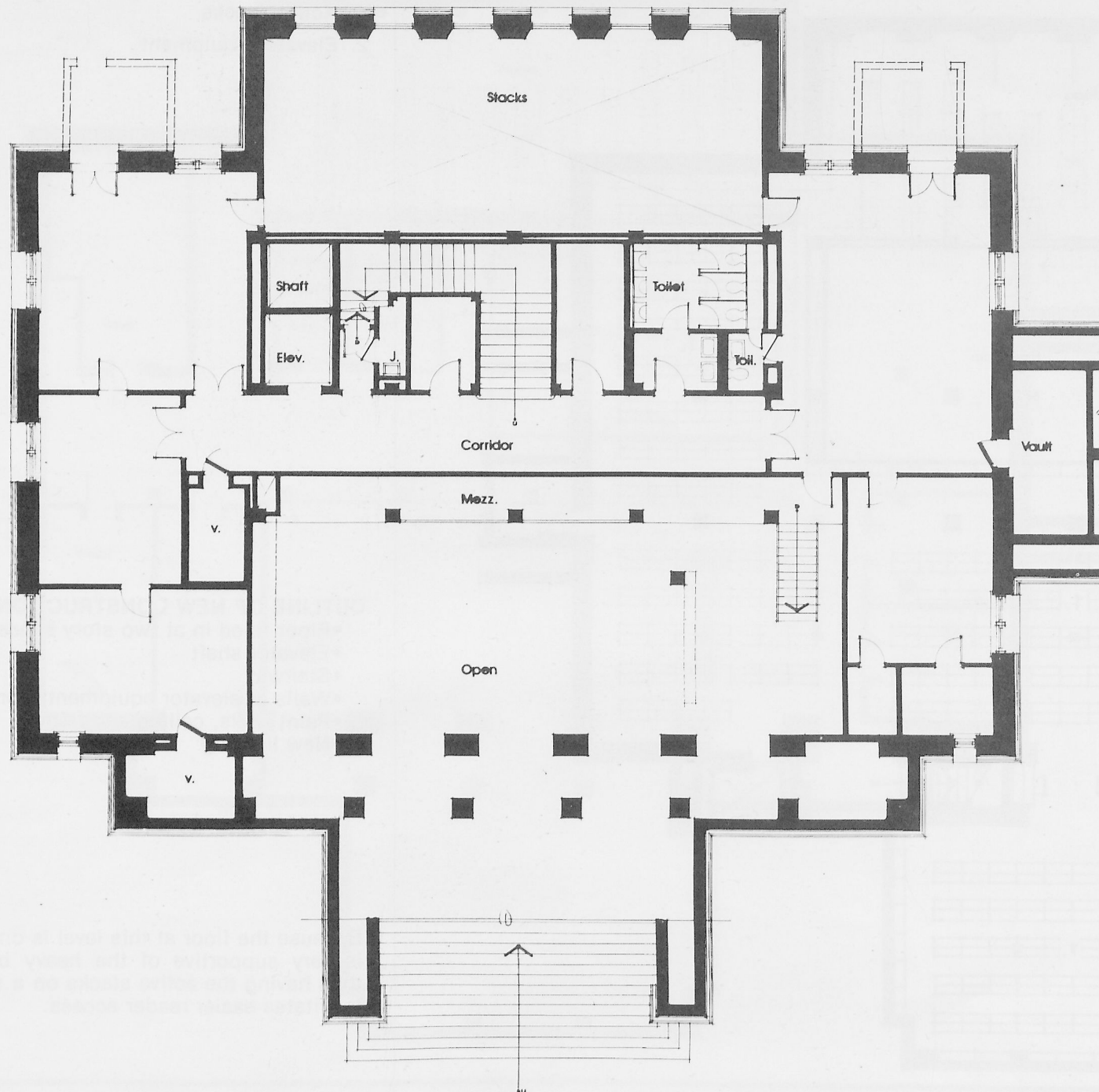
State Capitol Grounds Bismarck, North Dakota

**A Feasibility Study**

LIBERTY MEMORIAL 1981



## AREA TABULATION



Rear stacks	1020 s.f. *
Stair/elev.	496 s.f.
Walls	916 s.f.
Total:	2436 s.f.
Gross area:	8630 s.f.
Net useable	6194 s.f. **

### CONDITIONS

- No floor at center front (open to sub-basement.)
- Not so ornate plaster ceilings.

### DEMOLITION

- Entries on east side
- Existing toilet room
- Various walls

\*Not included is the other 1020 s.f. of rear stack at each floor.

\*\*With new floor, 3354 s.f. without new floor!

**Tvenge - Larson**  
**Architects / Planner**

405 - East Broadway Avenue  
Bismarck, North Dakota



**Ground Level**

**Liberty Memorial Building**  
**State Library Commission**

State Capitol Grounds Bismarck, North Dakota

**A Feasibility Study**

**LIBERTY MEMORIAL 1979**



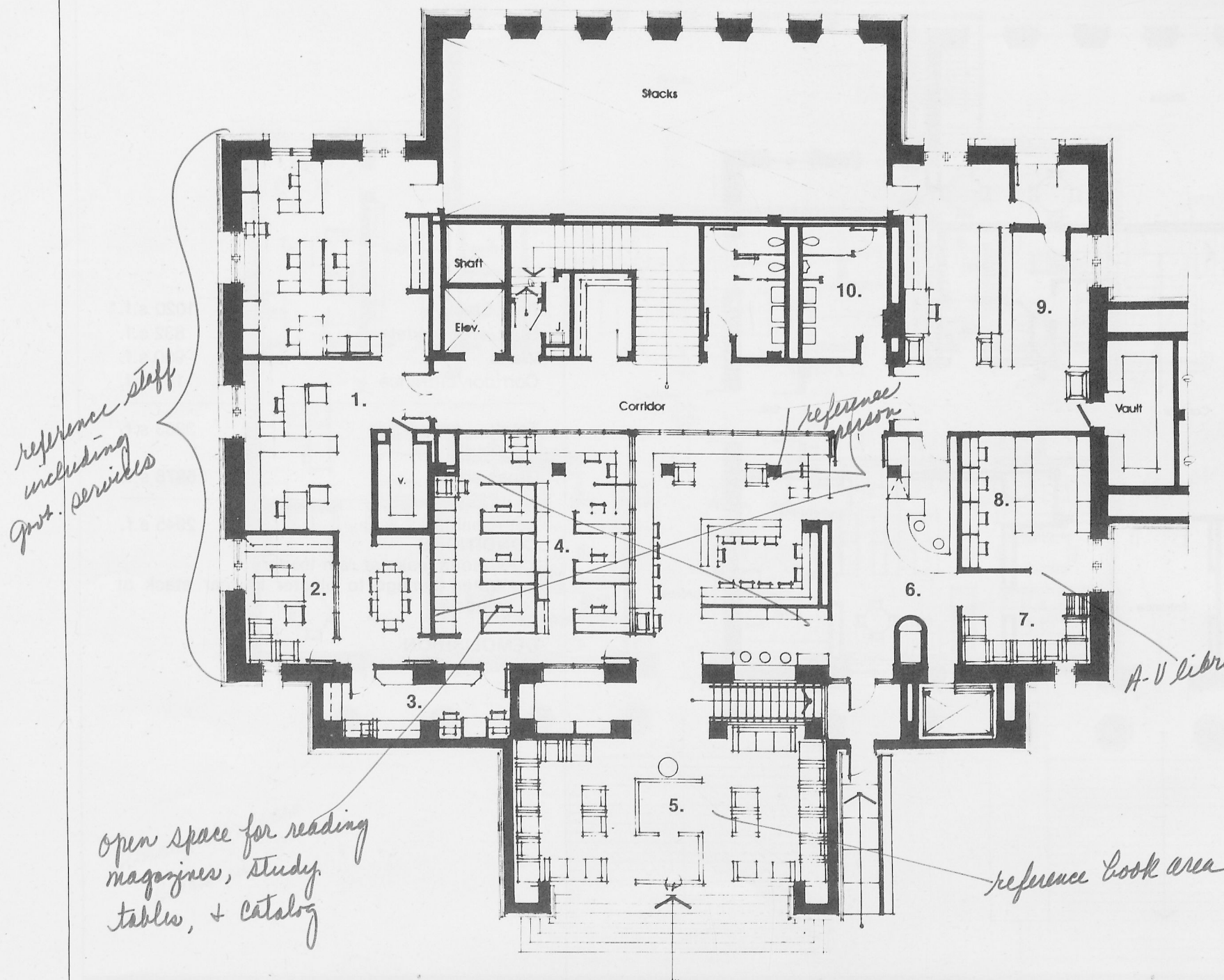
## ROOMS

1. Technical Services
2. Chief of library services
3. Teletype/TWX/copy
4. Reference staff
5. Large reading room
6. Circulation/card catalog
7. Small reading room
8. A/V Lounge
9. Delivery/shipping
10. Toilets

## OUTLINE OF NEW CONSTRUCTION

- New floor
- Handicap toilets
- New walls and partitions
- Paint walls
- Carpet floors
- New ceilings
- Elevator to sub-basement
- New handicap/pedestrian entrance at S.W. corner
- Millwork
- Equipment

This level becomes the people floor with all the patron oriented services and facilities. Arrangement allows for evening operation without traffic flow through the upper floor.



**Tvenge - Larson**  
**Architects / Planner**

408 - East Broadway North Avenue  
Bismarck, North Dakota



**Ground Level**

**Liberty Memorial Building**  
**State Library Commission**

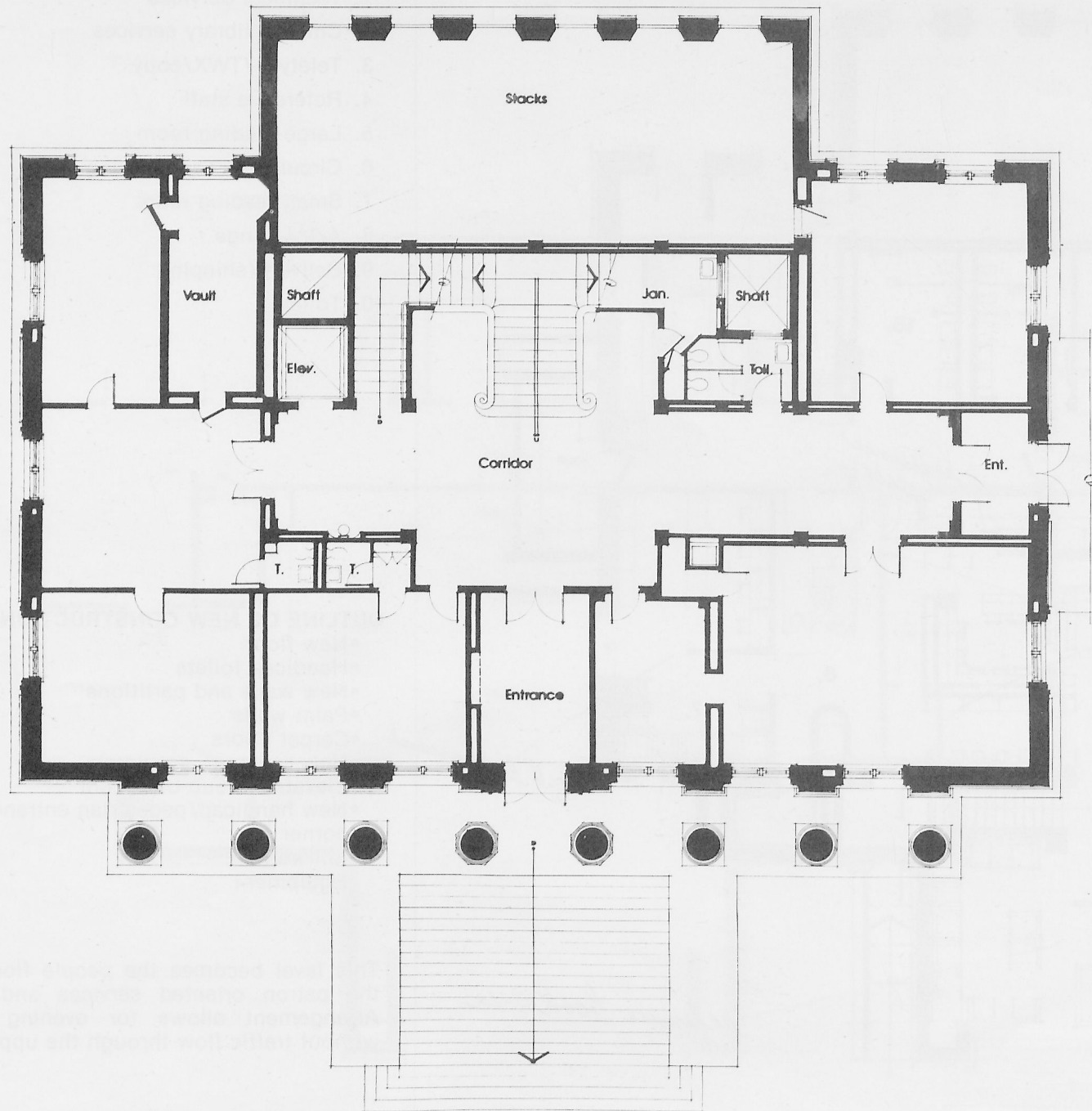
State Capitol Grounds Bismarck, North Dakota

**A Feasibility Study**

LIBERTY MEMORIAL 1981



## AREA TABULATION



Rear Stack	1020 s.f.*
Stair/elev./toilet	832 s.f.
Walls	900 s.f.
Corridor/entrance	1181 s.f.

Total: 3933 s.f.

Gross area: 6878 s.f.

Net useable: 2945 s.f.

### CONDITIONS

- Various leaks at rain leaders
- Water damage to plaster in rear stack at window.

### DEMOLITION

- Nothing

**Tvenge - Larson**  
**Architects / Planner**

405 - East  
Bismarck, North Dakota



**First Level**  
1/4" = 1'-0"

**Liberty Memorial Building**  
**State Library Commission**

State Capitol Grounds Bismarck, North Dakota

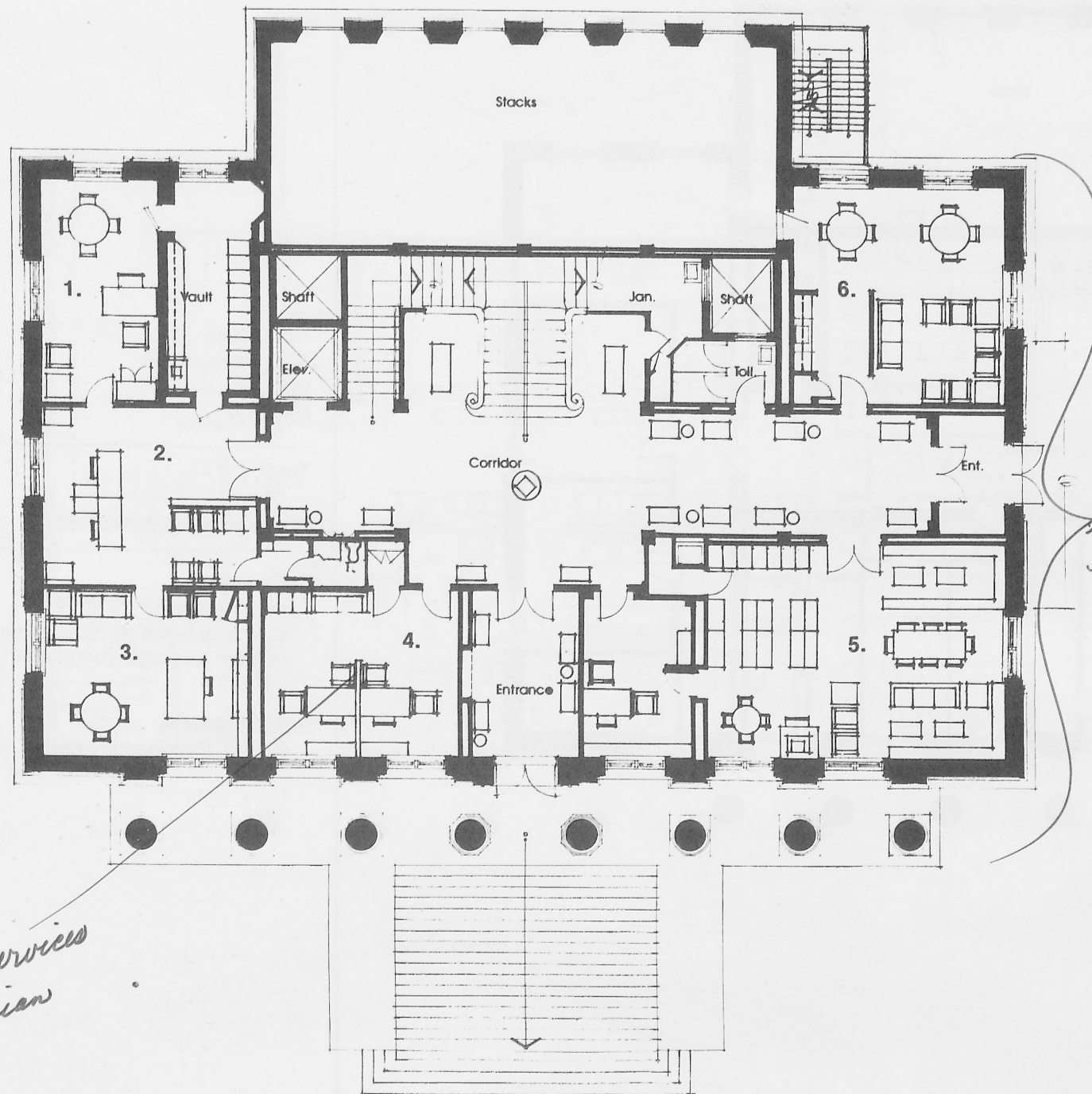
**A Feasibility Study**

\*Not included is the other 1020 s.f. of rear stack at each floor.

LIBERTY MEMORIAL 1979

## ROOMS

1. Fiscal officer
2. Administration
3. State librarian
4. Development consultants
5. Government Documents Reading Room and Office
6. Staff conference



## OUTLINE OF NEW CONSTRUCTION

- Repair plaster damage
- Floor coverings
- Wall and ceiling paint
- Railings at stairways
- Drinking fountain
- Millwork
- Equipment
- Revise window boxes for heat pump units
- Refurbish lighting

**Tvenge - Larson**  
Architects / Planner

405 - East  
Bismarck, North Dakota



**First Level**  
1/4" = 1'-0"

**Liberty Memorial Building**  
State Library Commission

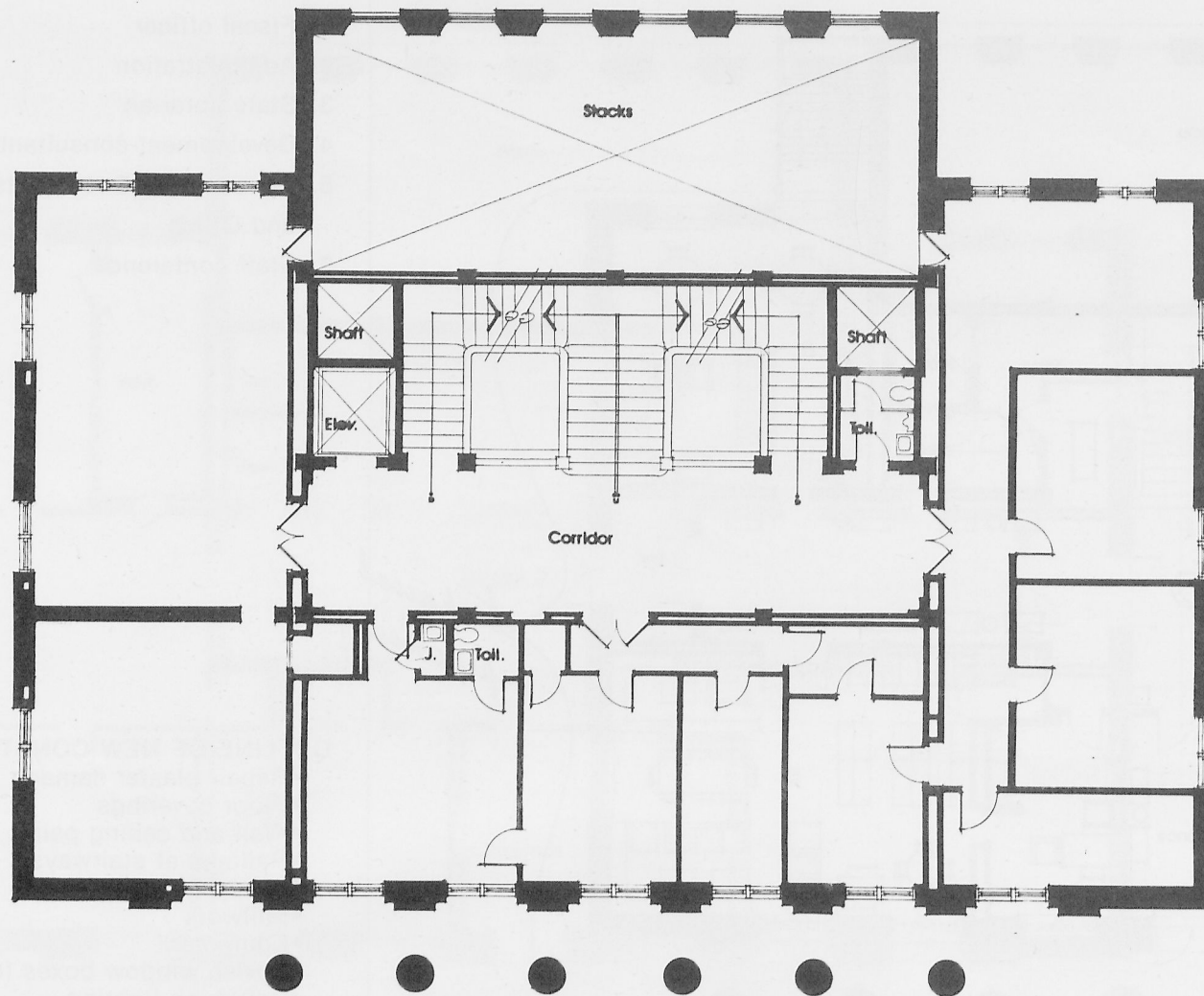
State Capitol Grounds Bismarck, North Dakota

**A Feasibility Study**

LIBERTY MEMORIAL 1981



## AREA TABULATION



Rear stack	1020 s.f.*
Stair/elev./toilet	832 s.f.
Walls	900 s.f.
Corridor	624 s.f.
<b>Total:</b>	<b>3376 s.f.</b>
<b>Gross area:</b>	<b>6878 s.f.</b>
<b>Net useable:</b>	<b>3502 s.f.</b>

### CONDITIONS

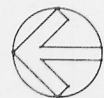
- Various leaks at rain leaders
- Water damage to plaster in rear stack at window.

### DEMOLITION

- Some interior partitions

**Tvenge - Larson**  
**Architects / Planner**

405 - East Broadway Avenue  
Bismarck, North Dakota



**Second Level**

**Liberty Memorial Building**  
**State Library Commission**  
State Capitol Grounds Bismarck, North Dakota

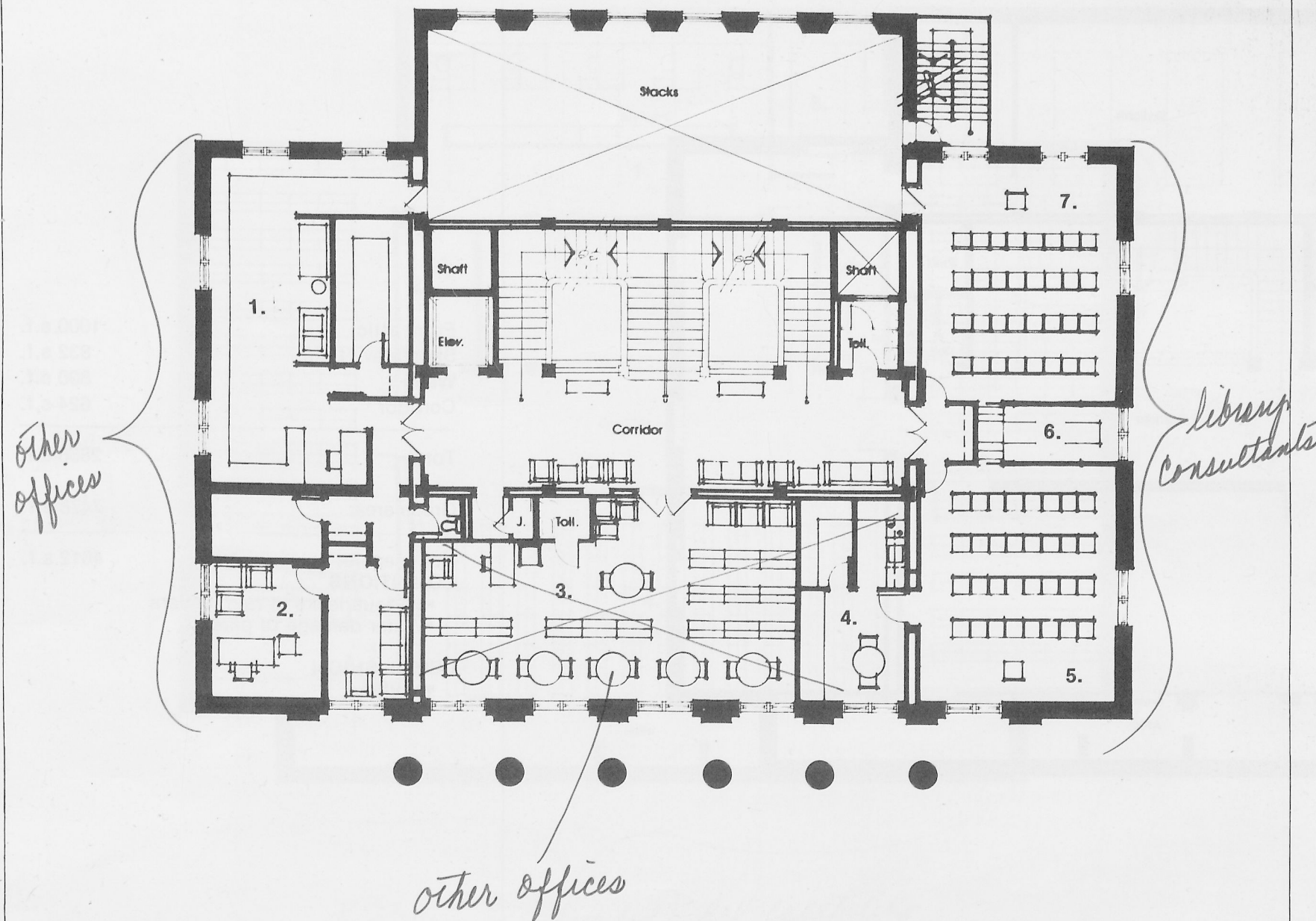
**A Feasibility Study**

\*Not included is the other 1020 s.f. of stack floor at each floor.

LIBERTY MEMORIAL 1979

## ROOMS

1. Central microfilming
2. Microfilm office
3. Elementary/secondary education media center
4. A/V production
5. Training/meeting auditoria
6. Projection room
7. Training/meeting auditoria



## OUTLINE OF NEW CONSTRUCTION

- Repair plaster damage
- Floor coverings
- Wall and ceiling paint
- Railings at stairways
- New fire escape
- New walls and partitions
- New ceilings
- Revise window boxes for heat pump units
- Refurbish lighting
- Millwork
- Equipment

This level will house functions related to the State Library, but not administered by the State Library, or the State Library will provide space to other agencies for periodic use.

**Tvenge - Larson**  
**Architects / Planner**

405 - East  
Bismarck, Broadway North  
Avenue  
Dakota



**Second Level**

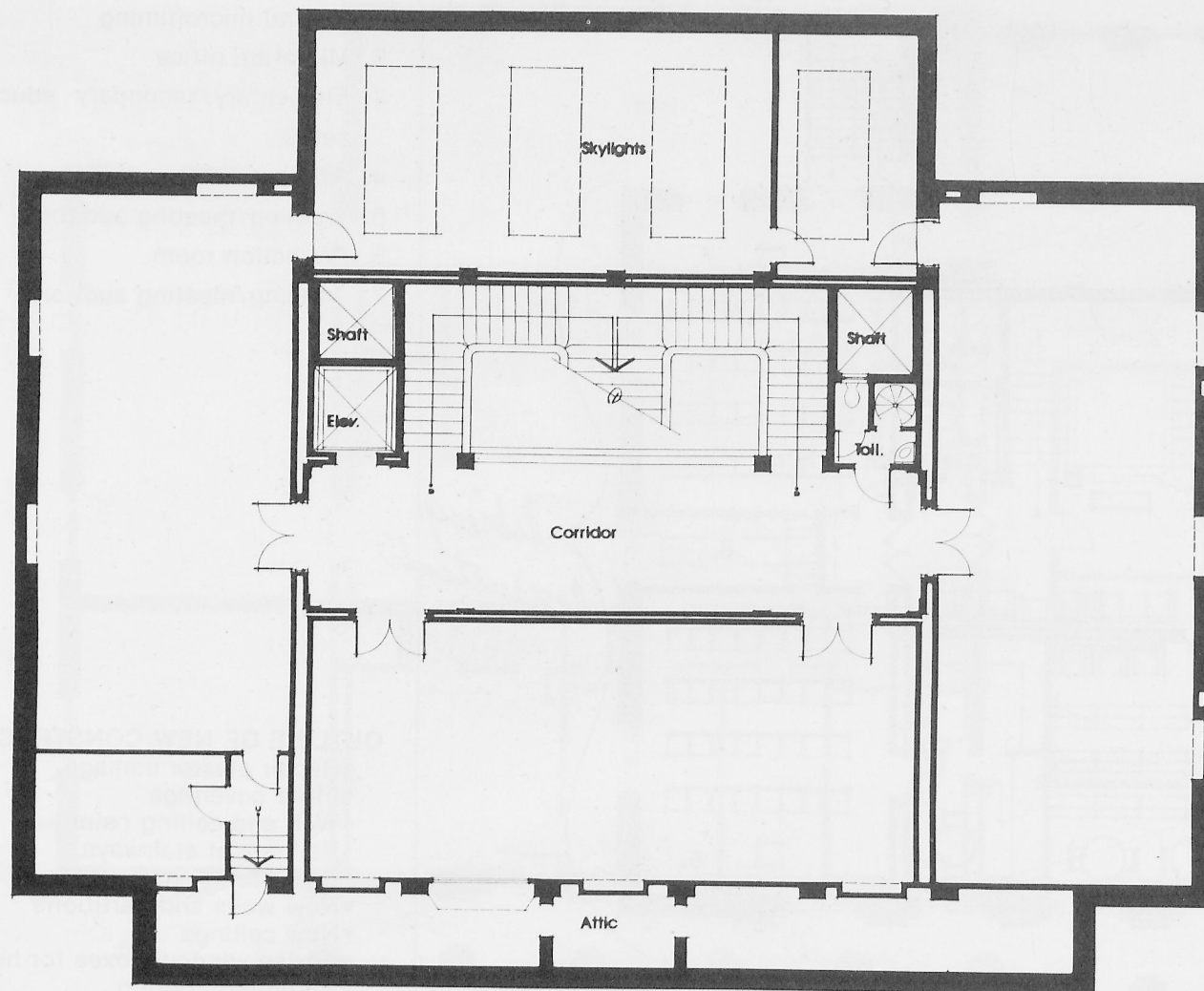
**Liberty Memorial Building**  
**State Library Commission**

State Capitol Grounds Bismarck, North Dakota

**A Feasibility Study**

LIBERTY MEMORIAL 1981





## AREA TABULATION

Front attic	1000 s.f.
Stair/elev./toilet	832 s.f.
Walls	800 s.f.
Corridor	624 s.f.

Total: 2866 s.f.

Gross area: 7478 s.f.

Net useable: 4612 s.f.

### CONDITIONS

- Various leaks at rain leaders
- Water damage to plaster

### DEMOLISHION

- Nothing

**Tvenge - Larson**  
**Architects / Planner**

405 - East  
Bismarck, North Dakota



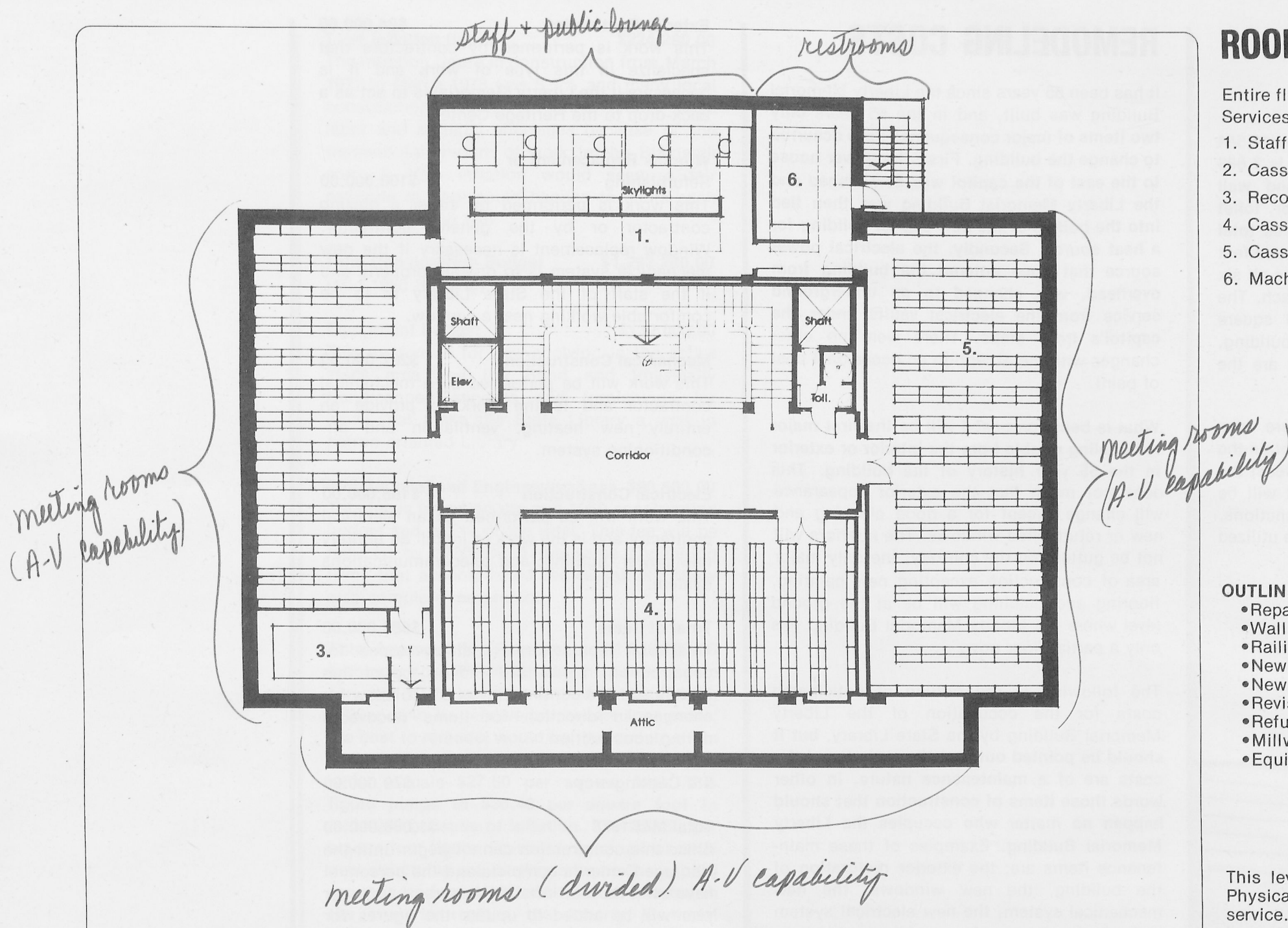
**Third Level**

**Liberty Memorial Building**  
**State Library Commission**

State Capitol Grounds Bismarck, North Dakota

**A Feasibility Study**

LIBERTY MEMORIAL 1979



## ROOMS

Entire floor: Blind and Physically Handicapped Services

1. Staff
2. Cassette storage
3. Recording
4. Cassette storage
5. Cassette and machine storage
6. Machine repair

## OUTLINE OF NEW CONSTRUCTION

- Repair plaster damage
- Wall and ceiling paint
- Railing at stairways
- New fire escape
- New skylights
- Revise window boxes for heat pump units
- Refurbish lighting
- Millwork
- Equipment

This level is for staff only as the Blind and Physically Handicapped Service is a mailing service.

**Tvenge - Larson**  
**Architects / Planner**

405 - East Broadway Avenue  
Bismarck, North Dakota



**Third Level**

**Liberty Memorial Building**  
**State Library Commission**

State Capitol Grounds Bismarck, North Dakota

**A Feasibility Study**

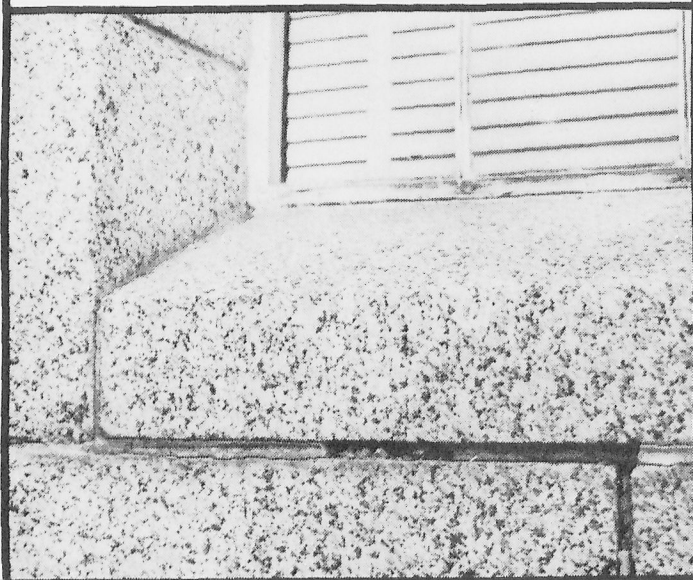
LIBERTY MEMORIAL 1981



## SQUARE FOOTAGE TOTALS

The Liberty Memorial Building contains 41,544 square feet of gross area. Of the total is 7,683 square feet of elevator, stairway and wall space and 3,038 square feet is corridor, toilet or mechanical space. These two figures total 10,721 square feet and leave 30,823 square feet of net useable space; this total includes all six rear stack floors at 1020 square feet each. The ratio of 41,544 square feet to 10,721 square feet is equal to a 75% efficient building, helping to keep this percentage high are the six tightly layered stack floors.

Earlier the 28,000 square feet figure was mentioned as the total required to maintain the State Library's current programs to at least the year 1988; considering the areas that will be shared or given entirely to other functions, (central microfilming) the space will be utilized completely.



## REMODELING COSTS

It has been 55 years since the Liberty Memorial Building was built, and in the 55 years **only two items of major consequence have occurred to change the building.** First, the power house to the east of the capitol was demolished and the Liberty Memorial Building was then tied into the boilers of the new capitol building for a heat source. Secondly, the electrical power source that once entered the building from overhead, was changed to an underground service from the electrical vaults under the capitol's front steps. There were no other changes with the exception an occasional coat of paint.

**What is being proposed will be the first major remodeling visible from the interior or exterior in the 55 year history of the building.** This does not mean that the exterior appearance will change except for a good cleaning and new or refurbished windows. The interiors will not be gutted, on the contrary; the only major area of construction excepting new painting, flooring and patching will be at the ground level where the Liberty Memorial Building has only a partial floor now.

The following is the outline of anticipated costs for the occupation of the Liberty Memorial Building by the State Library, **but it should be pointed out that the majority of the costs are of a maintenance nature, in other words those items of construction that should happen no matter who occupies the Liberty Memorial Building.** Examples of these maintenance items are; the exterior restoration of the building, the new windows, the new mechanical system, the new electrical system and of the items of general construction, essentials such as painting, floor covering and code related work.

The costs are outlined as follows:

**General Construction \$370,000.00**  
The work includes all interior/exterior work to be accomplished by either the general contractor or his subcontractors.

**Exterior Restoration \$94,000.00**

This work is performed by contractors that specialize in this type of work and it is necessary if the Liberty Memorial is to act as a back-drop to the Heritage Center.

**Window Replacement or Refurbishing \$100,000.00**

This work is performed by either a glazing contractor or by the general contractor. Window replacement is necessary if the new mechanical system is to operate properly and if the staff of the State Library is to be comfortable working near a window.

**Mechanical Construction \$267,000.00**

This work will be performed by a mechanical contractor and is the work to provide an entirely new heating, ventilation and air-conditioning system.

**Electrical Construction \$158,000.00**

This work will be performed by an electrical contractor and is the work to install an entirely new power, lighting, and telecommunications system.

**Total of Items \$989,000.00**

This total represents a cost developed for construction in mid-1978 and on top of this total is added a contingency of 8% to allow for changes in direction for items uncovered during construction.

**8% Contingency \$79,000.00**

**Total Mid-1978 \$1,068,000.00**

Since this construction cannot begin until the Heritage Center is complete and the personnel have been moved; inflation factors of 10% per year will be added to update the figures for mid-1980 construction.

**Year one inflation 10% \$106,800.00**

**Year two inflation 10% \$117,480.00**

**Total inflation figure \$224,280.00**

The inflation figure in construction from March 1977 to March 1978 was 8.5% and many local construction industry personnel predict local labor and material shortages because of the tremendous amount of work in the Bismarck area. A 10% inflation would seem a fair estimate of what could happen to costs each year of the next two.

**Total Construction Budget \$1,292,280.00**  
(Mid-1980 Bidding)

**Equipment Budget \$130,000.00**

This amount is for new shelving in the active stack area and the Blind and Physically Handicapped services and furnishings for areas that make the State Library a walk-in patron oriented Library.

**Architectural and Engineering Fees \$90,500.00**

This fee is based on the mid-1980 construction budget and is 7% of the total. This fee will be reduced by \$7500.00 if the same consulting firms that accomplished the feasibility study also complete the project.

**Total Appropriation Required \$1,512,780.00**

Incomparision; it can be noted that the figure for mid-1978 construction if extended in reference to its relative per square foot costs; **the cost to remodel would be:** the construction budget divided by the gross square footage, which equals **\$27.50 per square foot, this figure jumps to \$36.40 per square foot in mid-1980 because of inflation. The \$27.50 per square foot figure represents one-half of what new structures are costing now on the capitol grounds and possibly one-third or one-fourth the cost to replace the Liberty Memorial Building in its uniqueness.**

**TVENGE  
LARSON**

ARCHITECTURE • COMMUNITY AND REGIONAL PLANNING • INTERIOR DESIGN  
FIFTH FLOOR • COWAN BUILDING • 405 EAST BROADWAY • BISMARCK, ND 58501 • (701) 258-1600

SEPTEMBER, 1978



StateDoc  
Z  
733  
.N67  
L515  
1978

PERM  
COPY