Master Plan Report

South Carolina State Museum Columbia, South Carolina

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Preface

The following Master Plan Report was prepared to be used as a guide for the development of the proposed South Carolina State Museum to be located in Lexington County, in the Columbia, South Carolina, metropolitan area. In addition to outlining the Purpose and Roles of the Museum, the report describes the Programs that will be offered and whom they will serve, the necessary staffing to carry out the Programs, a detailed Facility Program describing the physical facilities that will be required, Capital and Operating Budgets, and a discussion of potential Revenue Sources. A Physical Master Plan section also is included which illustrates how the site will be used and the conceptual designs for the Museum and its exhibits. In addition, an Implementation section outlines the steps that must be followed to implement the Master Plan.

Major participants in the preparation of this Master Plan Report include the Commissioners of the South Carolina Museum Commission, whose names are listed below:

Guy F. Lipscomb, Jr., Chairman Mrs. R. Maxwell Anderson Mrs. Edward P. Guerard Dr. Ambrose G. Hampton, Jr. Mr. Arthur Magill Mrs. John F. Rainey Mr. Marvin D. Trapp Dr. Leo F. Twiggs Mr. David B. Verner

In addition, David C. Sennema, Director of the South Carolina Museum Commission, Overton G. Ganong, Deputy Director, Rudy Mancke, Curator of Natural History, Rodger Stroup, Curator of History, and Hedy A. Hartman, Program Administrator for State-Wide Services all provided valuable input throughout the planning process. Many others participated in a meaningful way through interviews that took place during the course of the planning work. These participants are listed in Section 9 - Research Data.

Museum master planning, architectural design, and coordination and production of this report were provided by E. Verner Johnson and Associates, Inc., Architects and Planners, of Boston, Massachusetts. Exhibition planning and design services were provided by A Couple Designers, Inc., Gerard and Elizabeth Hilferty and Associates, of Middleport, Ohio. McNair, Gordon, Johnson & Karasiewicz are the Columbia-based architects for this project. Special consultation was provided by the following engineering consultants: Souza & True, Inc., Cambridge, Massachusetts, for structural design and Helden Associates, Inc., Fairhaven, Massachusetts, for building and mechanical systems.

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Introduction

There are more than 4,000 museums in the United States today. Some are truly fine examples of what a museum can be, enjoying tremendous popularity and often attracting hundreds of thousands of visitors each year. Others languish in mediocrity, struggling for their day-to-day survival, with very little attention paid to them.

Truly outstanding museums have one thing in common -- an uncompromising pursuit of excellence. This pursuit of excellence encompasses <u>all</u> aspects of the museum and its activities, including the exhibitions and other programming, the collection, the building, and the staffing. From the beginning of our involvement with this project a year and a half ago, the South Carolina Museum Commission members and staff clearly emphasized their desire to create an outstanding museum for the state of South Carolina. To this end they have consistently pursued high quality, and as a result, all aspects of the State Museum have been planned to meet the most stringent criteria.

The Museum will be built on a spectacular natural site overlooking the Saluda River, where an aerial tramway will connect the new institution to the already extremely successful Riverbanks Zoological Park on the other side. The 190,000 sq.ft. building will include sufficient exhibit areas to tell the story of the history, natural history, and science and technology of the state of South Carolina and to display the best examples of the fine, decorative, and folk arts produced in the state. The long term exhibits will not only be educational; they will be fum. They will involve all of the visitor's senses of sight, hearing, touch, and even smell so that the cultural and natural heritage of South Carolina will come alive. Total environments, such as a re-creation of a portion of old Charles Town port, will be included within the exhibition sequence. These environments will allow visitors to step back into the past and experience what it might have been like to live in a given time and place in history. In addition, large areas will be set aside for the exhibition of major traveling shows.

The 52-acre site will include nature trails, an elevated nature walkway down to the Saluda River, and a pedestrian bridge connection over the Saluda River to encourage recreational use of the site. Both the elevated nature walkway and nature trails will include outdoor interpretive exhibits. These are the more public and popular aspects of what this new State Museum will be, but there will be much more than that.

The South Carolina State Museum will be staffed by highly qualified professionals so that all of the programs offered will be of consistent high quality. These staff members will insure that the State Museum truly serves the entire state of South Carolina. Upon request they will assist other museums with their education, exhibition, conservation, and other museum programming needs. They will offer training programs and technical assistance to museum personnel. They also will offer teacher training programs so that the history, natural his-

INTRODUCTION (continued)

tory, art, and science and technology curriculums of the schools in the state will be enriched. Working closely with the Riverbanks Zoo staff, they will create cooperative programs to reinforce joint visitation to both facilities, thereby increasing potential visitation to both the Museum and the Zoo.

Background

Planning on this project began several years ago. The State Museum's evolution from an urban museum sharing a site with the existing Columbia Museums of Art and Science to one that will establish a tie with the popular Riverbanks Zoo happened for several reasons. Consultants and advisors from both South Carolina and other areas of the country participated in the evolutionary process. Early in the planning it became clear that the site to be shared with the Columbia Museums of Art and Science would severely restrict the extent of the State Museum's facilities and programming and would eliminate any possibility for meaningful expansion in the future. It was clear that South Carolinians have an intense interest in their cultural and natural history, and would expect their State Museum to be able to grow.

A search for a larger, less restrictive site ensued, and an extraordinary piece of land along the Saluda River was found. This site includes an amazing diversity of plant specimens, the ruins of an historic old mill and sluice, and the banks of the Saluda River itself, delightful amenities for the Museum. The abutments of a bridge destroyed during the Civil War still exist some 100 yards downstream from the site. These abutments will simplify the construction of a pedestrian bridge over the River -- a project long in the planning stages by the Riverbanks Zoo. It was at this point in the planning process that the concept of providing an aerial tramway connection between the Museum and the Zoo was formed, and the idea was enthusiastically received by both institutions. It was felt that this third element would provide a positive reinforcement to cooperative programs and attract many people to both institutions.

The Future

The Master Plan Report provides the necessary framework for the creation of an outstanding Museum. The State Museum's potential for attracting the kind of visitation that will pay for a large portion of its operating costs will very much depend upon the level of excellence that is pursued.

It would be difficult to find a more exciting site, and the association with the Zoo is a tremendous asset. The building and the Exhibition Program are planned to provide a stimulating, educational, and visually appealing experience for visitors. It is felt that in order to provide a complementary institution to the Riverbanks Zoo, this level of excellence is absolutely essential. The Zoo's plans for future major exhibits, which include a new ape house and a new reptile house, intensify the need to create a high quality State Museum so that both institutions will be compatible. It also is clear that the high quality so evident at the Riverbanks Zoo has resulted in tremendous popularity and high

INTRODUCTION (continued)

annual visitation. This is an example that should be followed.

We feel that the plan presented in this report is appropriate for a state so rich in history and natural beauty and for a people that take such pride in their heritage.

The Report

The following is a brief description of each section of the report:

Section 1 - Purpose and Roles

The State Museum's Purpose and its Roles in Education, Exhibition, Collection, Research and Publication, State-Wide Services, and Underwater Fossil Management are outlined in this section.

Section 2 - Programs

The Museum's Programs in Education, Exhibition, Collection, Research and Publication, State-Wide Services, and Underwater Fossil Management are described in this section. Also included are a series of Exhibition Program Diagrams from which the Exhibition Program was developed.

Section 3 - Governing Structure and Staff Organization

This section includes an illustration of the governing structure and staff organization for the State Museum and job descriptions for major staff positions.

Section 4 - Facility Program

This section includes a Summary of Program Areas and the Facility Program Design Criteria, which outlines the function of each programmed area, accessibility requirements, special mechanical and electrical needs, desirable lighting and acoustical treatment, necessary furnishings and equipment, and special finishes required. In addition, a Program Organization Diagram is included to illustrate the spacial interrelationships that establish the basis for the building design.

Section 5 - Budgets

The estimated Capital Budget and an Operating Budget for fiscal year 1984/85 are included in this section.

Section 6 - Revenue Sources

Various sources for capital funding to construct the Museum are discussed in this section. Estimates are made of potential revenue to be generated through various Museum activities, and other sources of operating revenue are discussed.

INTRODUCTION (continued)

Section 7 - Physical Master Plan

This section includes plans, model photographs, and a written description and evaluation of the site and building, structural and mechanical concepts. In addition, a description is included of the recommended fire protection system and building security system. A chart is included which summarizes Conceptual Design Gross Area Calculations and a Summary of Net Exhibition Areas.

Section 8 - Exhibition Master Plan

This section contains a written description of the exhibition experience, visitor routes and options within the exhibits, exhibit highlights, and an overview of exhibit presentation techniques. In addition, overall floor plans of the Exhibition Areas, sketches of five specific exhibit areas, and an Exhibition Outline are included.

Section 9 - Implementation

A discussion of two phasing options, a Recommended Staff Hiring Schedule, and two phased capital budgets are included in this section. In addition, a Work-Time Schedule outlines each sequential step and the time necessary to execute it in order to implement this Master Plan.

Section 10 - Research Data

Included in this section is a list of people interviewed during the planning process, as well as groups who reviewed the master planning work at various stages of development. In addition, there is a brief reference bibliography compiled for the exhibit design consultant's conceptualization of the Exhibition Program.

Purpose and Roles

Introduction

The Purpose of any museum can be defined as its reason for existence. The Roles of the State Museum, which are defined in the categories of Education, Exhibition, Collection, Research and Publication, State-Wide Services, and Underwater Fossil Management, should be structured to serve its Purpose. Although it is possible for many institutions in the same geographic area to have the same general Purpose, the Roles of each institution should be unique in order to avoid duplication.

The definition of the State Museums's Roles should be reviewed every five years or sooner, should circumstances so require, in order to insure that the Museum continues to remain a vital and relevant institution for the people of the state of South Carolina.

PURPOSE AND ROLES (continued)

Purpose

The law creating the South Carolina Museum Commission contains the following statement with reference to Purpose:

"The primary function of the commission shall be the creation and operation of a state museum reflecting the history, fine arts and natural history, and the scientific and industrial resources of the state, mobilizing expert professional advice and guidance and utilizing all available resources in the performance of this function."

In 1976, the State Budget and Control Board assigned the Museum Commission responsibility for administering the provisions of the State Underwater Salvage Act relating to fossils. This responsibility is part of the purpose of the Commission as a State agency, but it is not a function of the State Museum.

The South Carolina Museum Commission has defined the Purpose of the South Carolina State Museum as follows:

The South Carolina State Museum is a public, non-profit, educational institution, operated by the State of South Carolina, whose Purpose is to stimulate an interest in and teach about the cultural history, natural history, fine, decorative, and folk arts, and the scientific and industrial resources of the state of South Carolina so that residents of and visitors to the state will be able to gain an understanding and appreciation of the state's past and present. In order to fulfill this Purpose, the Museum will be an exciting and constantly changing institution with an appeal to people of all ages. It is further the Purpose of the Museum to render assistance to other museums in the state.

Roles

The Museum's Roles in Education, Exhibition, Collection, Research and Publication, and State-Wide Services will be confined to the general Purpose of the Museum. They will be unique to this Museum so that it will not substantially overlap the roles of other institutions in the state. In defining the following Roles, the South Carolina State Museum affirms that they will be carried out statewide. The Museum will represent and serve all the people of South Carolina.

Education Role

The Museum's Education Role is to relate to the general public, teachers, and school groups through exhibits, publications, and special in-house and out-reach programs, the story of the cultural history, natural history, fine, decorative, and folk arts, and the scientific and industrial resources of the state of South Carolina. In addition, the Museum will offer edu-

PURPOSE AND ROLES (continued)

cational opportunities to museum professionals throughout the state in order to assist them in their work. Finally, special training programs for teachers will be offered in order to enhance the school curricula covering the various subject matters of the Museum.

Exhibition Role

The Museum's Exhibition Role is to present the cultural history, natural history, fine, decorative, and folk arts, and the science and technology of the state of South Carolina in visual form, and to make such information accessible and understandable to as many people as possible. To this end, the Museum's exhibits will be lively and appealing to all age levels. Many of them will be frequently changing. The intent of the exhibits will be to stimulate the visitors' interest in finding out more about the state of South Carolina so that they will not only develop a respect for and understanding of the past and present of the peoples, culture, and environment of South Carolina, but will also want to find out more after they leave the Museum.

Collection Role

One of the Museum's most important functions is to preserve culturally, aesthetically, and scientifically significant material related to South Carolina. To this end, the Museum's Collection Role is to locate, acquire, and preserve in perpetuity a well-documented collection of cultural history, natural history, fine, decorative and folk arts, and scientific and industrial materials and artifacts pertinent to its other Roles in Education, Exhibition, Research and Publication, and State-Wide Services. The focus of collections throughout will be the state of South Carolina. Materials pertinent to areas outside the state will be collected only when they will help interpret the story of South Carolina.

Since photographs are outstanding exhibit and educational items, the Museum will endeavor to collect negatives and prints of photographs of subjects within the scope of the Museum's Education, Exhibition, Research and Publication, and State-Wide Services Programs. The Museum also will collect and maintain negatives and prints taken for its own purposes.

The Museum will not typically collect archival material as part of its permanent collection. Exceptions may be allowed if the material has exhibition value or unusual research value, but such exceptions must be approved by the Collections Committee.

PURPOSE AND ROLES (continued)

Research and Publication Role

The Museum will carry out necessary research to document its permanent collection, to develop and continue its Exhibition and Education Programs, to obtain information for publications to support its Roles in Education, Exhibition, Collection, and State-Wide Services, and to conserve properly its cultural history, natural history, art, and science and industry collections. It will also encourage outside scholars to research topics relevant to its stated Roles.

State-Wide Services Role

The Museum will lend assistance to other museums of South Carolina regarding all aspects of museum operations, including education, exhibition, collection, research and publication, and the conservation of cultural history, natural history, art, and science and industry collections. In addition, the Museum will continue to encourage growth and development of other museums in the state.

Underwater Fossil Management Role

Under the provisions of the Underwater Salvage Law, the South Carolina Museum Commission will manage the fossil resources beneath the state's navigable waterways. This program is a function that is separate from the programs of the State Museum.

Programs

Introduction

The State Museum's Programs in Education, Exhibition, Collection, Research and Publication, State-Wide Services, and Underwater Fossil Management will be structured to meet the Museum's Roles in each of these categories. The Program descriptions found in this section are meant to be general in both scope and character, representative of the range of activities that will be carried out in order that the Museum can reach as wide an audience as possible and achieve the desired level of excellence. Since the potential users of the Museum are of all ages and educational backgrounds, special emphasis will be placed on offering a wide variety of programs which will appeal to different segments of the population. Figures No. 1 through 5 - Exhibit Plan Bubble Diagrams also are included in this section.

From time to time the programs will change in order to reflect the current needs and interests of the users of the Museum. It is important that the Museum remain constantly aware of these ever-changing needs and interests so that it will continue to function as an exciting and meaningful institution to the people of the state of South Carolina.

Education Program

The Museum will conduct educational programs on two levels: statewide outreach programs and programs conducted at the Museum. The highest priority will be given to the outreach programs, since the Museum's mission is to serve the whole state of South Carolina. The Museum's outreach programs will include the following:

- Preparation and dissemination of educational kits and suitcase exhibits for classroom use, which will include printed and audio-visual materials and objects.
- Television productions utilizing both instructional and educational television.
- 3. Teacher workshops to inform the state's school teachers about the Museum's teaching resources and to prepare them to properly utilize the Museum's exhibits.
- In-service training for teachers to give them information on the state's cultural history, natural history, arts, science, and technology for classroom use.
- 5. The Museum will publish a variety of technical and informational materials for distribution or sale to both the general public and to the school systems of the state. This type of programming will emphasize that which relates most directly to the Purpose, Roles, and Programs of the Museum.

The Museum's "in-house" educational programs will include the following:

- Programs especially designed for various age levels of school children will include curriculum-correlated lectures and tours by docents of the Museum's exhibition areas and nature trails, classroom activities and demonstrations, and combinations of these activities.
- 2. Live demonstrations will be carried out relating to all the subject areas of the Museum's exhibits.
- 3. Since the educational programs of the Museum will be too extensive to be performed solely by paid employees, a corps of volunteer docents will be trained by the Museum's educational staff.
- 4. The Museum's docents will provide guided tours of the exhibition areas and nature trails for pre-arranged organized groups (i.e., non-school groups).
- Lecture series, literary events (poetry readings, etc.), film series, and music and dance performances will be presented.

- 6. Special interest classes will be presented, taught by both Museum staff and others.
- 7. Meeting space will be provided for organized groups with interest compatible to those of the Museum, such as SCAN, Audubon Society, historical societies, rock and mineral clubs, science clubs, etc.
- 8. The Museum will cooperate with the institutions of higher education in South Carolina in their educational efforts.

Exhibition Program

The State Museum's Exhibition Program will address the following four areas as outlined in the Museum's statement of Purpose: cultural history, natural history, fine, decorative, and folk arts, and the scientific and industrial resources of the State of South Carolina.

Interdisciplinary Approach to the Exhibition Program

Museums usually treat these different disciplines separately; in fact, they most often assign them to separate halls or areas within the building. The approach that will be taken at the State Museum will be different. Here, the exhibition sequence will illustrate the interrelationships among the various disciplines of cultural history, natural history, fine, decorative, and folk arts, and the scientific and industrial resources of the state of South Carolina. This approach, which presents a compelling challenge, was arrived at after lengthy consideration of the resources and activities of other museums in the state. Many of these museums perform a function that cannot or should not be duplicated; however, none deal with South Carolina's cultural history, natural history, art, and science in an integrated manner. It is the multidisciplinary nature of the South Carolina State Museum that provides an opportunity to take this uncommon approach to the Exhibition Program.

All four disciplines will be combined in a chronological presentation that will explain to the visitors the significant links between the activities of human beings in South Carolina and their natural environment. Art, science, and technology will be shown to be tools that South Carolinians have used throughout their history to interpret, define, explain, and illustrate their relationship with the world and with each other.

The interdisciplinary approach to the exhibits will recognize the various regions of the state. Exhibits dealing with the natural and human activities in each region will lead to broad conclusions about their relationships.

The Audience

The Exhibition Program will appeal to a diverse audience. South Carolinians are the first priority audience, but tourists from all over the world will find the presentations alive with excitement and information for them, too. The exhibits will appeal to people young and old; people of all races and religions; men and women. School groups will be given special priority. The Museum will represent a special resource for teachers and will present teacher workshops explaining how best to use the Exhibition Program for class study.

The Special Story of South Carolina

The Exhibition Program will impart what is special about South Carolina--how the state developed. It will illustrate similarities with and differences from the rest of the country. The story of South Carolina will establish the identity of the state and its people. For instance, an exhibit on the American Revolution will stress South Carolina issues, military leaders, and battles fought within the state. This material will then be compared with activities taking place at the same time in other colonies, giving a national perspective to the story of the Revolution in South Carolina.

The exhibits will emphasize people and the environment as well as objects. Objects from the collection will be used to illustrate the activities of people and the character of their environment.

The exhibits will be as comprehensive as possible within the limits of the varied age and educational levels of the audience as well as space and aesthetics. They will attempt to communicate clearly and simply, while still illustrating the complex interrelationships that exist everywhere but are often unrecognized. Explaining these vital interrelationships is the basis of the interdisciplinary approach to the Exhibition Program. The intent of the exhibits will be to pique the curiosity of South Carolinians so that when they return home they will use their local resources to learn more about their state and region. Several areas within the exhibits will provide information to direct people to museums and other cultural and natural sites around the state.

Study Stations will be located in each major exhibit area. Here computer terminals will allow visitors access to a vast amount of in-depth information on various aspects of the subject matter. A detailed time-line will be presented in each Study Station employing text, photos, graphics, and small artifacts. Study collections will be accessible in glass covered drawers at each Station. All of these elements will be designed to be easily changed and updated.

Since participation furthers learning, each major exhibit will contain elements that encourage visitors to become actively involved. "Think and Do" areas will invite visitors to take part in such activities as chipping flint or ginning cotton. Decision areas will urge the visitor to vote on the cultural, political, or environmental issues of that particular period in history. Staff and docents also will present demonstrations in the various areas provided.

Changing Exhibitions

Major galleries and smaller sections of the long term exhibition galleries will be reserved for changing exhibitions. The Exhibition Program will grow and change to reflect the seasons, new events and ways of thinking, and the public interest. The exhibits will derive their ultimate life from this aspect of the program. Each time the visitor comes to the Museum it will be

in some ways new and always "up to the minute." These flexible, changing exhibit galleries and areas will be able to accommodate everything from a small collection of dried wild flowers to accent the season up to major international shows in the main changing gallery. This gallery is designed to be large enough to handle major exhibitions, such as the King Tut Show.

Outdoor Exhibits

The exhibits will open to the outdoors at several points along the tour route. The exhibit on the "Golden Age of the Colony" will open into a greenhouse. After passing through the botanical exhibits in the greenhouse, the visitor will emerge into the beautiful formal garden. At other points, the visitor can go from the major exhibit route or a temporary gallery onto a terrace which will offer more exhibits and a view of the beautiful site.

Before or after his Museum exhibit tour, the visitor can traverse the site on interpretive nature trails to learn more about an interesting variety of flora and fauna. The trail will go from the Museum on the top edge of the site down a series of steps and platforms to the flood plain of the Saluda River. The beautiful rapids will provide an appealing backdrop to interpretive exhibits on the old State Road and the bridge destroyed during the Civil War. The Saluda textile mill ruins will be of great interest to the visitor as he learns of the story of this pre-Civil War textile mill at the edge of the site. The aerial tramway trip to or from the Riverbanks Zoo will offer exciting views of the landscape, the river, and the city.

Traveling Exhibits

The Museum will prepare a series of traveling exhibits as an outreach program. These exhibits will cover a variety of subjects within the disciplines of history, natural history, science, and art. The traveling exhibits will be available to museums and other related organizations. Traveling educational exhibit kits will be developed using text, graphics, and items from the teaching collection. These can be used by teachers in classrooms all over the state.

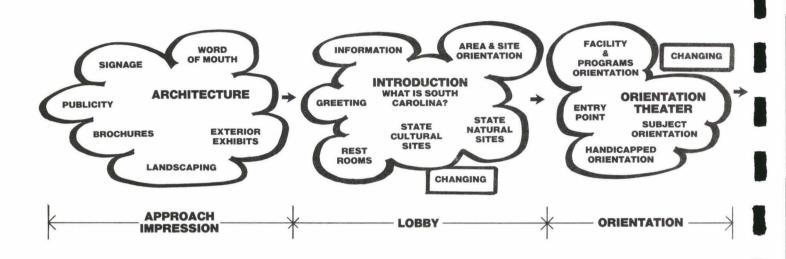
Exhibit Plan Bubble Diagrams

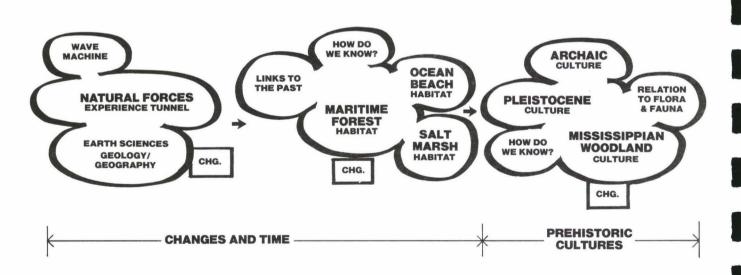
Figures No. 1 through 5 - Exhibit Plan Bubble Diagrams on the following pages are based on research done by the exhibit design consultants following the exhibit guidelines established by the curators and staff of the South Carolina State Museum. The South Carolina Museum Commission members also offered suggestions and advice regarding many areas of the exhibits. The bubble diagrams are also geared to fulfill the objectives set forth in the Exhibition Program. The exhibits will follow a chronological order along a loose linear path. This path will open into large free-choice exhibit areas. The route will offer options to by-pass areas in order to explore more detailed information and resources.

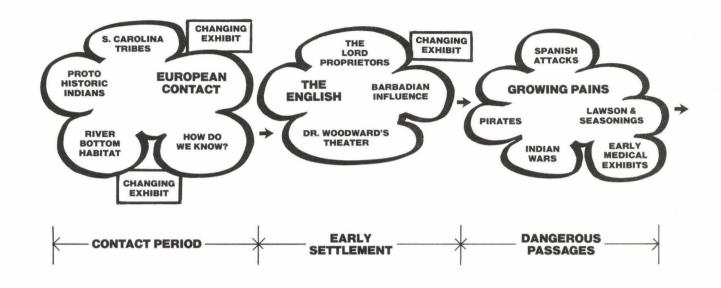
The exhibits will be divided into major time periods, each with dominant images, and theme areas which will easily convey the tenor of the times. Specific exhibits on various events, issues, persons, flora and fauna, crafts, etc., will surround the central theme areas.

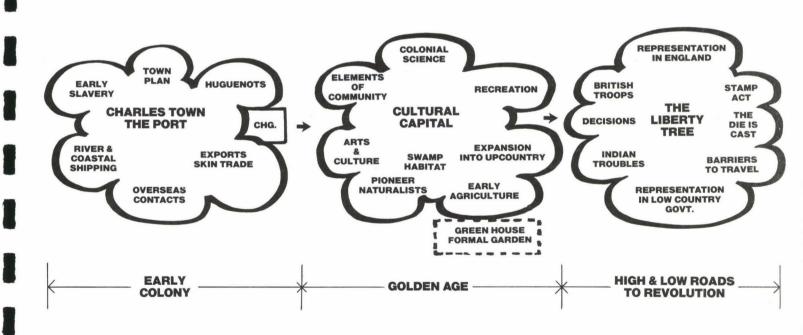
A changing gallery for seasonal or temporary exhibits stressing various combinations of history, natural history, science, and art will be adjacent to each chronological section of the exhibits. Many of the exhibits will have access to an outside terrace, garden, or natural area. A "How Do We Know?" exhibit, describing the investigations of archaeologists, naturalists, historians, scientists, etc., will be located in appropriate areas. Facilities for live demonstrations and programs for small groups will be located throughout the exhibits.

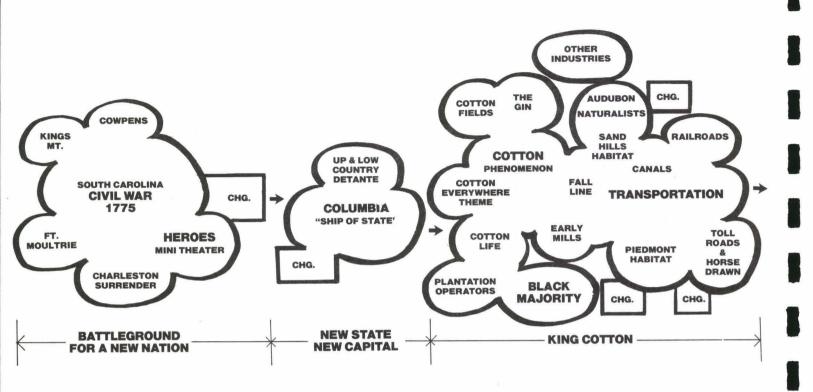
The order and relationships of the specific exhibit subject areas are merely approximate in these bubble diagrams. The sizes of the "bubbles" are symbolic of the relative importance of the subject matter rather than the space that will be allotted. These bubble diagrams merely serve as the basis for more detailed development of the exhibit script, which appears in Section 9 - Appendix and the Exhibition Plans included in Section 7 - Physical Master Plan.

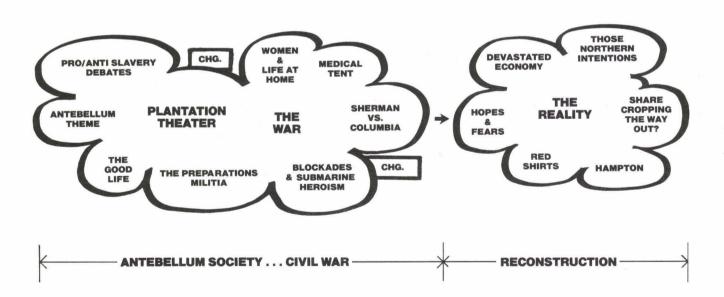


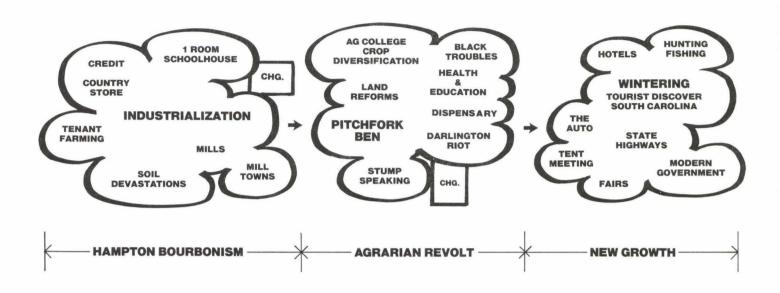


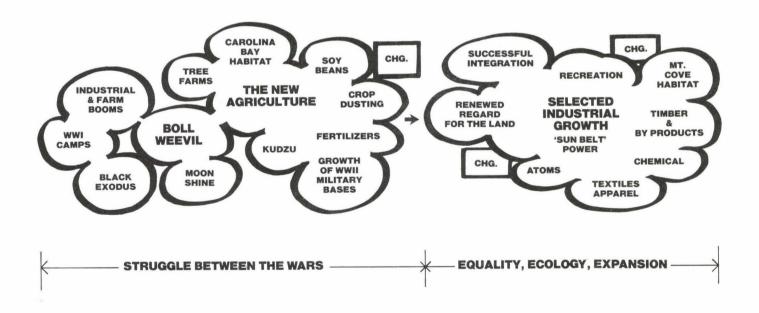


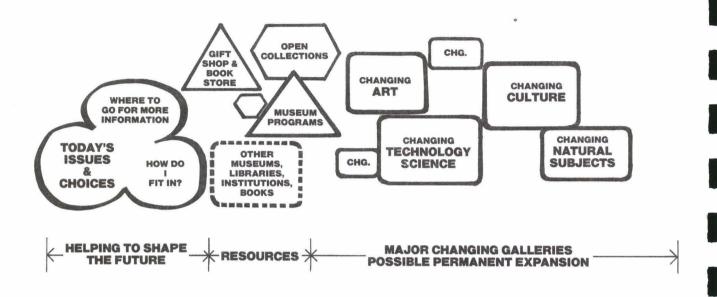


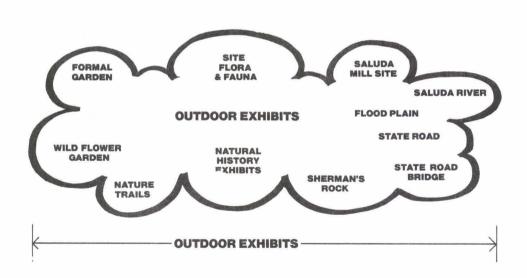












Collection Program

The location, acquisition, and preservation of objects appropriate to the Museum's state Programs in Education, Exhibition, and Research and Publication constitute the Collection Program.

The Museum will maintain two types of collections in the areas of cultural history, natural history, fine, decorative, and folk arts, and science and industry materials pertinent to the state of South Carolina. The first collection type is the permanent collection, which will contain prime exhibit and research materials. This collection will be catalogued. The second collection type is the teaching collection, which will contain material less suitable for exhibition and/or research, or duplicate material. This collection will be inventoried but not catalogued. The teaching collection will be used primarily by the Education Program staff, such as in suitcase exhibits and demonstrations.

The Collections Committee will prepare and periodically update a written policy governing the management of the collections for approval by the South Carolina Museum Commission.

The following outline describes the Museum's Collection Program by subject area:

Cultural History

The cultural history collection will consist almost wholly of man-made objects which will vary widely in material and size. They will be made of metal, wood, cloth, paper, ceramics, stone, bone, plastic, and other materials. They may range in size from automobiles and boats to buttons and coins. Objects collected should be associated in some clear way with the history of South Carolina (e.g., made, sold, imported or used in the state), should be similar to objects used in South Carolina, or should be useful in providing a comparison, contrast, or perspective on South Carolina material. The highest priority should be given to collecting objects suitable for exhibit and research.

Objects for exhibition use should be original, although exceptions may be allowed if an original of an indispensable item is unavailable. In any case, the best available object should be used. The decision to acquire a reproduction will rest with the Collections Committee. Ideally, objects from the teaching collection will be used in working demonstrations.

In collecting cultural material, the Museum will observe pertinent state and federal laws.

Natural History

The principal focus of the natural history collection will be the flora, fauna, fossils, rocks, and minerals of South Carolina. Objects from other areas can be collected if such objects can be used to put South Carolina material within a broader context. In some cases the Museum will collect a few live specimens for demonstrations, but for obvious reasons such specimens will not be catalogued into the permanent collection.

No specimen of any animal or plant protected by the Endangered Species Act, the Lacey Act, the Black Bass Act, the Marine Mammal Protection Act, the Migratory Bird Treaty Act, or any other federal or state legislation will be collected unless all legal requirements for such collection are met.

The Museum will collect specimens by hunting or trapping only when such specimens are absolutely necessary for exhibit or study and cannot be obtained in any other manner. In such collecting, the Museum will abide by all applicable state and federal laws.

Fine Arts, Decorative Arts, Folk Arts

The Museum's art collections should include works dealing with South Carolina subjects, works by native South Carolinians, and works either by artists residing in the state or by those who have done substantial work in South Carolina.

Science and Industry

The Museum's science and industry collection will include objects relevant to the application of science in South Carolina and to illustrate scientific and technological principles. Representative industrial products of the state and objects useful in providing a comparison, contrast, or perspective on South Carolina science and industry will also be collected.

At any particular time the collection will be distributed among a variety of locations. Some objects will be on exhibit, in storage, or in the Museum's Conservation Laboratory. Others will be used in the Museum's Education or Research and Publication Programs or will be out on loan to other institutions. Still others will be used in the Museum's traveling exhibits. During the first few years of operation it is expected that a major portion of the permanent collection will either be on exhibit or on loan.

The collections will be preserved in good condition for the use of future generations, and adequate records will be maintained to identify the place and circumstances of origin, history of use, means of acquisition and source, restrictions with regard to use, and a description of physical condition upon

arrival at the Museum. Each collection artifact will be photographed as part of the cataloguing process. Proper temperature and humidity conditions and a sufficiently vibration-free environment for the safe storage and exhibition of the Museum's collection will be maintained at all times throughout the exhibition areas, the collection storage areas, and any other places where collection artifacts may temporarily be housed.

For the care and restoration of the cultural history, natural history, art, and science and industry collections of the Museum, a Conservation Laboratory will be established, the services of which may be offered to other institutions in the state. The conservation of works on canvas will be accomplished at other conservation facilities that already exist elsewhere in the state. Accurate records will be kept of conservation work that has been performed.

The collection records will be stored in a fireproof vault in the registration area, and a duplicate copy of these records will be maintained and securely stored off the premises.

The Museum will develop a written policy governing the conditions of borrowing and lending artifacts. If items needed for exhibition or research cannot be acquired for the permanent collection, the Museum will attempt to borrow such items from other museums. Whenever possible, the Museum will lend material to other museums in the state and out-of-state, with in-state institutions having the higher priority. All loans and borrowings shall be for specific periods of time and will require final approval of the Executive Director. Before lending objects, the Museum will verify that climate control, lighting, and security conditions in the borrowing museum are suitable for the display of said objects. When appropriate, the Museum also will require borrowing institutions to carry insurance on the items borrowed.

Research and Publication Program

Using the Museum's collections and research library, and the collections and resources of other museums, libraries, and institutions of higher learning, the professional staff of the South Carolina State Museum will be encouraged to research topics relevant to the cultural history, natural history, fine, decorative, and folk arts, and the science and industry of the state of South Carolina in order that the Museum's programs in Education, Exhibition, Collection, and State-Wide Services will remain current and meaningful.

Books and other research material pertinent to the Museum's programs will be acquired for use by the staff to further their research efforts. The Museum will allow college and university faculty, graduate students, and recognized scholars controlled access to its library and collections for research purposes.

The publications which will result from these research efforts will include but not be limited to, gallery guides for Museum visitors, informational material regarding the Museum's exhibits, programs for distribution to the public schools throughout the state, and proceedings of museum workshops for distribution to museum professionals.

State-Wide Services Program

The South Carolina State Museum will assist other museums of the state in the following manner:

The Museum will provide or arrange technical assistance upon request. In addition, the Museum will research and publish technical and informational materials regarding aspects of museum operations for distribution to the museums of the state.

When staff time and funding permit, the Museum will assist other museums in the preparation of exhibits. Traveling exhibits will be made available on a loan basis to other museums throughout South Carolina.

Using the Museum's Conservation Laboratory, the South Carolina State Museum conservation staff will assist other institutions in South Carolina with the conservation of their cultural history, natural history, art, and science and industry collections. The Museum will not deal with works on canvas as long as suitable facilities for the conservation of such objects are available in the state.

Workshops will be presented focusing on subjects pertinent to museum operations. These workshops will be offered to all interested persons.

Underwater Fossil Management Program

Under the authority granted it by the Underwater Salvage Act, the South Carolina Museum Commission will, at its discretion and in cooperation with the Institute of Archaeology and Anthropology, University of South Carolina, license hobby divers and commercial salvors interested in recovering fossils from the state's navigable waters.

The Commission will also cooperate with the Institute of Archaeology and Anthropology in developing, determining, and enforcing rules and regulations governing the recovery of fossils and artifacts from the state's navigable waters.

Using a team of trained divers, the Commission will survey the state's underwater fossil resources, collect fossils for the State Museum, and monitor licensed commercial salvage operations.

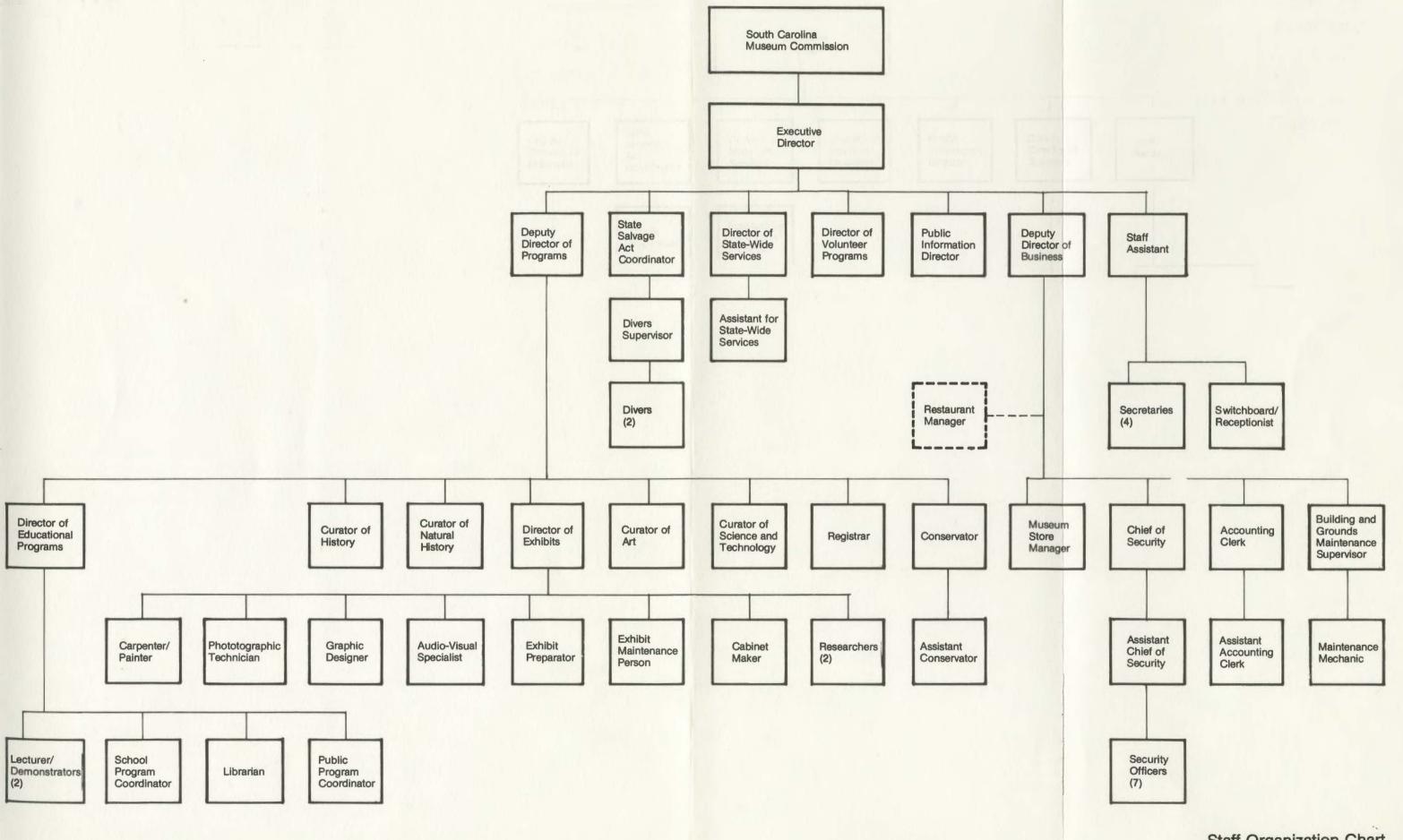
Governing Structure and Staff Organization

Introduction

This section of the report includes Figure No. 6 - Staff Organization Chart, which illustrates the organization of the State Museum staff, and job descriptions for thirty staff positions. As illustrated in the chart, the three key staff positions are the Executive Director, the Deputy Director of Programs, and the Deputy Director of Business. The work of all other staff members will be supervised either directly or indirectly by these three people.

By the time the Museum is opened in summer of 1984, its full-time staff complement should be fifty-four people.

It is important during the next few years of planning, design, and construction of both the building and exhibits that these fifty-four staff members be phased in at appropriate times in order to provide necessary input. If this is not done, the Museum's programs will not be well planned and operational in time for the opening of the new Museum. The phasing of staff hiring is included in Section 8 - Implementation.



GOVERNING STRUCTURE AND STAFF ORGANIZATION (continued)

Executive Director

It is the responsibility of the Executive Director to insure that the Purpose, Roles, and major educational emphasis as outlined in this Master Plan Report or as later amended through due process are carried out in the Museum's Exhibition, Education, Collection, Research and Publication, Assistance to Museums, and Underwater Fossils Management Programs. To this end, the Executive Director will serve on all major Museum policy committees. In order to provide effective leadership, the Executive Director must continually be aware of the changing needs of the Museum's audience and strive to enlarge this audience in order to serve a broad spectrum of the community and to create a wider understanding of the Museum's mission. To this end, the Executive Director will work closely with the Public Information Specialist and will be responsible for the supervision and approval of all public relations efforts.

It is the responsibility of the Executive Director to see to it that adequate staff are available to carry out the Museum's programs and provide proper care for the collection. To this end, he or she will seek out well-trained professional staff members who are supportive of the Museum's goals and knowledgeable of the state of the art of proper collection care, interpretation, and exhibition. The Executive Director must establish both the professional and ethical standards for all Museum functions, including acquisition, interpretation, conservation, exhibition, research and publication, and the operation of the Museum Store.

Working closely with the professional staff, the Executive Director will locate loan exhibitions that will broaden the Museum's temporary exhibition program and give final approval of all exhibitions, including long term, temporary, and traveling exhibitions prepared by the Museum staff. Assisted by the Deputy Director of Programs and the curatorial staff, the Executive Director also will seek out new collections, attract them to the Museum, and negotiate for their acquisition.

The Executive Director will work closely with the Deputy Director of Business, the Deputy Director of Programs, and the Director of State-Wide Services to identify and pursue potential funding and grants for on-going expenses and projects. In order to accomplish this, the Executive Director will become familiar with the various federal grant programs, private and corporate foundations, business leaders, and individuals who will be of financial help to the Museum. Preparation of grant applications will be a joint effort by the Executive Director and the aforementioned staff members, all of whom will develop a high level of competence in this important endeavor.

The following seven Museum staff members will be hired by and report directly to the Executive Director: Deputy Director of Programs, Deputy Director of Business, Director of State-Wide Services, Director of Volunteer Programs, Public Information Specialist, Staff Assistant, and Coordinator of State Salvage Act.

GOVERNING STRUCTURE AND STAFF ORGANIZATION (continued)

Deputy Director of Programs

Working closely with the Executive Director, the Deputy Director of Programs will coordinate all the activities concerning collection management, exhibition, interpretation, research, and education. In order to accomplish this work, he or she will direct, supervise and review the work of the Director of Exhibits, the Director of Educational Programs, the Curators, the Conservator, and the Registrar. The Deputy Director of Programs will be responsible for the hiring of these staff members and the evaluation of their work based on his or her knowledge of the broad spectrum of the Museum's Purpose and Roles.

Working with the Executive Director and the curatorial staff, the Deputy Director of Programs will seek out new collections, attract them to the Museum, and assist with negotiations for their acquisition. In addition, this person will work closely with the Executive Director, the Deputy Director of Business, and the Director of State-Wide Services to identify and pursue potential funding and grants for on-going expenses and projects. The Deputy Director of Programs will serve on all major Museum policy committees.

The Deputy Director of Programs will coordinate the various operating budgets prepared by the staff under his supervision for his review and approval.

Deputy Director of Business

The Deputy Director of Business will handle all of the day-to-day business operations of the Museum. He or she will supervise the keeping of all financial records and coordinate the annual budgets prepared by various staff members in order to prepare a total annual budget for the Museum each year. In addition, the Deputy Director of Business will make periodic reports of cash flow and predicted expenses and will make projections of revenue sources available to the Museum each year in order to identify potential surpluses and deficits on a timely basis. The disbursement of all funds to operate the Museum will be supervised by the Deputy Director of Business. The Deputy Director of Business will work closely with the Executive Director, the Deputy Director of Programs, and the Director of State-Wide Services to identify and pursue potential funding and grants for on-going expenses and projects. In addition, this staff member will serve with the Executive Director and Deputy Director of Programs on all major Museum policy committees.

In essence, although all the following will not specifically be carried out by the Deputy Director of Business, he or she will have the ultimate responsibility for the maintenance and care of the entire facility, safety of the staff, visitors, and collections, disbursement of all funds, budgetary planning, and supervision of the work of all administrative staff and Museum Store operations.

GOVERNING STRUCTURE AND STAFF ORGANIZATION (continued)

The Deputy Director of Business will report directly to the Executive Director and will be responsible for the hiring and supervision of the following five staff members: Staff Assistant, Accounts Clerk, Museum Store Manager, Security Chief, and the Building and Grounds Maintenance Supervisor. Whether or not the Museum restaurant is run by an outside franchise or by a staff member, the Deputy Director of Business will be responsible for the overall supervision of such an operation.

Director of Exhibits

The Director of Exhibits will assist outside exhibit design consultants with the development and design of the Museum's major long term exhibits, supervising and giving final approval to their design, fabrication, and installation. Working closely with the Director of Educational Programs, the Curators, the Registrar, and the Director of State-Wide Services, the Director of Exhibits will help to plan all exhibits produced by the Museum staff. He or she will also serve as an exhibit consultant to other museums of the state. Specific responsibility for aesthetic planning and design will include the arrangement of objects, provision of suitable lighting, coordination of related audiovisual presentations, selection of background colors for the gallery walls, cases, pedestals, etc., and supervision of the installation of labels and signs prepared by the Graphic Designer.

It will be the responsibility of the Director of Exhibits to prepare drawings and specifications for exhibit fabrication work, to coordinate the bidding for such work when it is to be performed by an outside firm, to approve or reject the fabrication work, and to supervise the installation of the exhibits. The Director of Exhibits also will prepare sketches and/or models for use in design reviews, and supervise and assist with the work of the Exhibit Preparator. It will be the responsibility of the Director of Exhibits to insure that all the Museum's exhibits are properly maintained and in good working order and that the total visual environment of the Museum is appropriate and consistent with the image of the State Museum, including all graphics, signs, lighting, furnishings, and equipment in all public areas of the building and the site.

Working with the professional staff, the Director of Exhibits will help to locate potential loan exhibits to broaden the temporary exhibition program and assist with negotiations for these exhibits.

The Director of Exhibits will develop the annual budget for long term and temporary exhibitions and their maintenance and will administer the funds allocated for this purpose. He or she will report to the Deputy Director of Programs and will coordinate and supervise the work of the Exhibit Preparator, the Graphic Designer, the Audio-Visual Specialist, the Exhibit Maintenance person, the Cabinetmaker, the Researchers, the Carpenter/Painter, and the Photographic Technician.

Graphic Designer

Working with the Director of Exhibits, the Graphic Designer will be responsible for the design of all Museum signs and publications and the preparation and installation of labels for exhibitions. The Graphic Designer also will prepare layouts for the gallery guides, program materials to be distributed to the public schools throughout the state, proceedings from Museum Personnel Workshops, and any other publications produced by the Museum. In order to carry out this work, the Graphic Designer will coordinate the interpretive materials prepared by the Director of Education, the curatorial staff, and the Director for State-Wide Services; prepare sketches and mockups for design reviews, and produce layouts and paste-ups of camera-ready artwork. Review and approval of the visual aspects of all Museum publications and other printed materials produced by outside printers and publishers will be the responsibility of the Graphic Designer.

The Graphic Designer will typeset label text and silkscreen labels and graphics for Museum exhibits and signs and will assist with the installation of exhibits. He or she will operate the Museum's graphic production equipment, see to it that it is maintained in good working condition, and supervise the use of all graphic production equipment by other staff members.

The Graphic Designer will report directly to the Director of Exhibits and will establish budgets for the production of Museum publications and printing work, exhibition labels, and Museum signs for review and approval by the Director of Exhibits.

Researchers

The Researchers will work with the Director of Exhibits, the Director of Educational Programs, the Director of State-Wide Services, the Curators, the Librarian, the Exhibit Preparators, and the Graphic Designer in order to assist with the preparation of interpretive material for the Museum's Exhibition and Education Programs.

The Researchers will report to the Director of Exhibits, who will supervise and coordinate their work.

Photographic Technician

The Photographic Technician will be responsible for the documentary photography of Museum collection objects, as well as processing and printing of these photographs which will be included in the Registrar's records and used for curatorial and exhibition research. In addition, the Photographic Technician will photograph, process, and print visual documentation of the Museum's Exhibition and Education Programs for Museum records and for publicity purposes. This person will be responsible for the maintenance and supervision of the photolab and darkroom and for the ordering of all supplies and equipment required to carry out his or her work, including film, photographic papers, camera parts, darkroom equipment, lighting equipment, etc.

The Photographic Technician should be skilled at the operation and routine maintenance of audio-visual and motion picture equipment and be able to perform minor repairs to these and other photography-related equipment. The Photographic Technician should have competency in both black and white and color photography, processing, and printing.

Although the Photographic Technician will report to the Director of Exhibits, who will schedule his or her work and approve budgets for equipment and supplies, this staff member will work closely with several other Museum staff members, including the Graphic Designer, the Public Information Officer, the Registrar, the Conservator, the Curators, and the Audio-Visual Specialist.

Audio-Visual Specialist

The Audio-Visual Specialist will be responsible for the production of films, including script writing, photography, and film editing, and the selection of background music and sound recordings to be used in the Museum's exhibition and education programs. In addition, the Audio-Visual Specialist will produce photographs and color slides for use in the Museum's educational and informational programs, exhibits, or public relations publications. He or she will select and secure educational films and slide sets and, working with the Director of State-Wide Services and the Director of Educational Programs, arrange for the distribution of these materials and Museum-produced films to the public schools and other museums throughout the state.

The Audio-Visual Specialist will research and recommend for purchase audio-visual equipment and supplies and supervise the installation by the Exhibit Preparator of any audio-visual equipment within the exhibition areas. This person also will be responsible for the maintenance of all the Museum's audio-visual equipment or the coordination of this work by outside help. The Audio-Visual Specialist will train Museum staff to use the audio-visual equipment and will supervise the loan and distribution of such equipment to other institutions in the state.

The Audio-Visual Specialist will report to the Director of Exhibits, who will coordinate and supervise his or her work.

Exhibit Preparator

The Exhibit Preparator will prepare specimens and models for new exhibits. In addition, this person will assist with the installation of new exhibits, including the fabrication of cases, panels, pedestals, and other exhibition fixtures; installation of exhibit-related audio-visual equipment; painting gallery walls, exhibit back-drops, and exhibition fixtures for changing exhibitions; and installation of graphics and signs in all areas of the Museum.

The Exhibit Preparator will report to the Director of Exhibits, who will supervise and schedule this staff member's work.

Exhibit Maintenance Person

The Exhibit Maintenance Person will be responsible for the maintenance of all Museum exhibits, including the repair of all movable and machine-operated exhibits, except audio-visual devices, that have been subjected to the wear and tear of day-to-day use. This work will include refinishing and painting of marred surfaces, repair of exhibit-related lighting, replacement of damaged glass or plexiglass, etc. The Exhibit Maintenance Person also will alert the Graphic Designer to any damage requiring the repair or replacement of exhibit-related graphics and will notify the Audio-Visual Specialist of similar problems related to audio-visual equipment.

The Exhibit Maintenance Person will report to the Director of Exhibits, who will supervise and schedule his or her work.

Cabinetmaker

The Cabinetmaker will be responsible for the fabrication of exhibition cases, pedestals, etc., and other Museum-related furnishings requiring the services of a highly skilled finish carpenter. He or she will work closely with the Director of Exhibits, the Audio-Visual Specialist, the Graphic Designer, the Exhibit Preparator, the Exhibit Maintenance Person, and the Curators and Registrar to carry out this work.

The Cabinetmaker's work will be coordinated and supervised by the Director of Exhibits.

Carpenter/Painter

The Carpenter/Painter will be responsible for general maintenance carpentry work not requiring the skills of a finish carpenter. This person's work also may include the construction of temporary partitions, painting walls, constructing temporary enclosures, etc. The Carpenter/Painter will assist the Cabinetmaker and the Exhibit Maintenance Person with their work.

The Carpenter/Painter will report to the Director of Exhibits, who will schedule his or her work.

Director of Educational Programs

The Director of Educational Programs will be responsible for the content and implementation of all the Museum's educational programs and will recommend to the Deputy Director of Programs priorities for these programs. He or she will remain well apprised of current museum education trends and will work with the Deputy Director of Programs, the Director of Exhibits, the Director of State-Wide Services, the Curators, and the Librarian on the development and planning of the Museum's exhibits. The development of instructional materials, such as gallery guides, teacher manuals, and suitcase exhibits to be loaned out to the public schools of the state will be this person's responsibility.

As a liaison between the public schools of the state and the State Museum, the Director of Educational Programs will be responsible for developing programs that meet the needs of the school children, for developing and administering outreach programs, and for the conceptualization of film programs, demonstrations, lectures, etc., relevant to the Museum's objectives. The Director of Educational Programs also will be responsible for the scheduling of the Museum's auditorium and meeting spaces for educational use.

Responsibility for collection objects being used in the Museum's Education Program will lie with the Director of Educational Programs.

The Director of Educational Programs will develop the annual budget for educational programs and will administer the funds allocated for this purpose. He or she will report directly to the Deputy Director for Programs and will coordinate and supervise the work of the Public Program Coordinator, the School Program Coordinator, the Lecturer/Demonstrators, and the Librarian.

Public Program Coordinator

The Public Program Coordinator will assist the Director of Educational Programs with the planning of educational programs and special events directed toward the public at large, such as guided tours of the exhibits, film and lecture series, music, theatrical, and dance performances, etc. It will be this person's responsibility to organize, schedule, and implement all of the Museum's educational programs directed to the general public and to supervise the Lecturer/Demonstrators who present these programs. In addition, the Public Program coordinator will act as a Lecturer/Demonstrator when the need arises.

The Public Program Coordinator will train volunteers to act as docents to tour the general public through the exhibits and to assist with the presentation of special events, including the setting up of lights, moving furniture, selling tickets, acting as ushers, etc.

The Public Program Coordinator will report to the Director of Educational Programs.

School Program Coordinator

The School Program Coordinator will assist the Director of Educational Programs with the planning of educational programs and special events directed to the school children of the state. The organization and implementation of all these programs will be this person's responsibility, and he or she will supervise the work of Lecturer/Demonstrators and docents carrying out these programs. In addition, the School Program Coordinator will act as a Lecturer/Demonstrator when the need arises. The School Program Coordinator will work with the Director of Educational Programs to prepare pre-visit orientation materials for teachers bringing class groups to the Museum. The training of volunteers to act as supplementary Lecturer/Demonstrators and docents will be the responsibility of the School Program Coordinator.

The School Program Coordinator will report to the Director of Educational Programs.

Lecturer/Demonstrators

The Lecturer/Demonstrators will give talks and demonstrations to scheduled groups of general Museum visitors and school groups on a pre-arranged schedule. One Lecturer/Demonstrator will be responsible for natural history programs and the other will be responsible for cultural history programs. Both will have competence to present art and applied science programs. The Lecturer/Demonstrators will assist with the training of volunteers to help them with their work. When the Lecturer/Demonstrators are not preparing or presenting programs, they will assist the rest of the Education Program staff with their various duties.

The Lecturer/Demonstrators will report to the Director of Educational Programs, who will schedule and supervise their work.

Curators

The Curators of History, Natural History, Art, and Science will be responsible for the following tasks as they apply to their areas of specialization.

They will continually seek out and recommend for acquisition new collection objects that they feel would be valuable additions to the Museum's collections and, through their professional affiliations, will assist the Executive Director and the Deputy Director of Programs with the negotiation and acquisition of such objects. The Curators will assist outside exhibit design consultants with the development of the Museum's major long term exhibits. In addition, working with the Registrar, Director of Exhibits, and the Director of Educational Programs, they will propose and research on-going exhibit themes, select objects to be interpreted, research and document collection objects for use in the Exhibition and Education Programs, and for publication purposes, provide academic interpretation for the Director of Exhibits and the Director of Educational Programs, and assist with the preparation of exhibition label text. In addition, they will deny or recommend requests for specific collection artifacts for use in the Museum's exhibits, education programs, or for loan to other institutions. When necessary, the Curators will assist with the training of Volunteers.

The Curators will assist the Registrar and Conservator with the monitoring of the condition of objects in the collections, making recommendations regarding ideal storage conditions based upon on-going research and identifying objects in need of conservation. In addition, they will periodically check objects on exhibition for signs of deterioration. The Curators will remain well apprised regarding all conservation matters as they apply to collection objects within their areas of specialization.

The Curators will report to the Deputy Director of Programs.

Registrar

The Registrar is responsible for the registration and accessioning of all new collections, including identification, cataloguing, and recording each object upon its arrival at the Museum. The information in these records will include, among other things, method of collection, a history of past ownership, means of acquisition, restrictions of use, and the condition of each object upon its arrival at the Museum. The Registrar will maintain all records and an inventory of the collections and will record the movement of all collection artifacts. In essence, no object, either belonging to the Museum or on loan from another institution, will be moved from its assigned location without prior knowledge of the Registrar. In addition, it will be the responsibility of the Registrar to arrange for adequate insurance coverage for the Museum's collections.

Two sets of collection records will be maintained, one of which will be stored in the Museum's fireproof vault, and the other in a secure place off the Museum premises. The Registrar will supervise the use of the collection records by all staff members and by visiting researchers. Details of conservation work performed on collection artifacts will be incorporated into the collection records. The Registrar will photograph each collection artifact for inclusion in the collection records, including photographs of artifacts before and after conservation work has been completed.

The Registrar also will arrange for the shipping of artifacts to and from the Museum and will see to it that all artifacts are securely transported to their destinations. He or she will also arrange for proper insurance coverage and prepare required paperwork for such shipments.

Working closely with the Conservator and the Curators, the Registrar will insure that the fumigation of Museum collection objects is carried out on a timely basis and that proper levels of temperature, relative humidity, and lighting are maintained in order to protect the collections from environmental damage. The reorganization of collection storage areas, when required, and intermittent surveys of conservation needs will be part of the Registrar's responsibilities.

The Registrar will report to the Deputy Director of Programs, who will coordinate and supervise his or her work.

Conservator

The prime responsibility of the Conservator is the conservation and preservation of the State Museum's history, natural history, science, and decorative arts collections. The work of the Conservator will be governed by priorities set by the Deputy Director of Programs, who will work closely with the Curators and the Registrar to establish a schedule for conservation work. The Conservator will keep written records of conservation activities, will maintain the conservation laboratory in good condition, and will order the necessary supplies and equipment to carry out his or her work. The Conservator will consult with the curatorial staff regarding conservation problems, advising them regarding proper storage for the various types of collection objects. He or she also will advise the Director of Exhibits and the Director of Educational Programs regarding the suitability of certain collection objects for exhibition, travel, or use in educational programs.

In order to carry out these responsibilities, the Conservator will maintain close contact with professional organizations in the conservation field and remain well apprised of the latest developments in object conservation. The Conservator also will provide consultation to other museums in the state and, when time permits, provide conservation services to these other museums.

The Conservator will report to the Deputy Director of Programs and prepare annual operating budgets for conservation work for his or her approval. The work of the Assistant Conservator will be scheduled and supervised by the Conservator.

Librarian

The Librarian will care for and maintain the Museum's research collections of books, periodicals, photographs, and oral history tapes. Specific duties will include the processing of all book purchases and periodical subscriptions upon recommendation of other Museum staff members and the classification, cataloguing, and circulation of these materials. In addition, the Librarian will locate library materials for the Museum staff and visiting researchers and, upon request, furnish reference and bibliographic material to these users. The Librarian also will process requests for materials from the State Library and arrange for inter-library loans.

The Librarian will supervise the Research Area, see to it that the library collection is properly shelved and stored, and arrange for the binding of journals and conservation of library materials. In addition, this person will supervise the work of volunteers assisting with cataloguing and other library tasks.

The Librarian will report to the Director of Educational Programs and will prepare annual operating budgets for his or her review and approval.

Director of State-Wide Services

The Director of State-Wide Services will act as a liaison between the State Museum and other museums within the state and will create and administer an information center where visitors will be able to learn of other museums, historic sites, and natural areas in the state. He or she also will administer the State Museum's traveling exhibit program. The Director of State-Wide Services will plan, organize, and coordinate workshops and training courses for museum professionals and, upon request, will conduct on-site visits and/or arrange for consultant services to be provided to other museums in the state. This staff member also will provide any other kind of technical information and assistance which may be requested by museums. The Director of State-Wide Services will work with the Executive Director, the Deputy Director of Programs, and the Deputy Director of Business to identify and pursue potential funding and grants for ongoing expenses and projects.

The Director of State-Wide Services will report to the Executive Director and will coordinate and supervise the work of the Assistant for State-Wide Services and volunteers assisting with the implementation of these programs.

Public Information Director

The Public Information Director will create and implement methods of publicizing Museum programs and activities and coordinate all public relations work. This work will include the preparation and distribution of press releases; preparation of the Museum newsletter; publication of articles about the Museum in all print media; and presentation of informational radio and television programs and/or announcements to better acquaint the public with the Museum and its programs. It will also be the responsibility of the Public Information Director to plan and organize receptions for openings of new long term and temporary exhibitions as well as any special fund raising events sponsored by the Museum. In order to carry out this work, the Public Information Director will maintain close liaison with all forms of public media and maintain a close working relationship with the Museum staff in order to learn about newsworthy Museum activities. The Public Information Director will have the responsibility to keep well apprised of the needs and interests of the Museum's potential audience and communicate this information to the Executive Director.

The Public Information Director will work with the Graphic Designer, who will be responsible for the preparation of all graphics related to publicity work, and will work with the Audio-Visual Specialist to produce slide shows, films, etc., specifically for public relations purposes. He or she will speak in public to promote the State Museum and will assist Museum officials with the preparation of public statements regarding the Museum and its programs.

The Public Information Director will report to the Executive Director and will prepare operating budgets for all public relations activities for approval by the Executive Director.

Director of Volunteer Programs

The Director of Volunteer Programs will organize a comprehensive volunteer recruitment and training program to meet the diverse needs of the Museum. Requests for volunteers may come from the Director of Educational Programs, the Director of Exhibits, the Director of State-Wide Services, the Public Relations Specialist, the Librarian, the Museum Store Manager, the Registrar, the Curators, the Building and Grounds Supervisor, and the Security Chief. Volunteers may be trained as docents to provide guided tours of the Museum's exhibition areas, as lecturers and instructors to assist with the Education Program, as ticket takers and ushers for Museum-sponsored special events, and as additional security staff. They may assist in the Museum Store, help with the clerical tasks of accessioning new collections, provide specialized research for the Exhibition and Publication Programs, and organize and run special fund raising activities to benefit the Museum. The Director of Volunteer Programs will work closely with the Public Relations Specialist to publicize the special needs of the Museum for certain types of volunteers. Overall coordination of work of the volunteers will be the responsibility of the Director of Volunteer Programs. He or she will keep time records of volunteer service and will act as a liaison between the Museum staff and the volunteers.

The Director of Volunteer Programs will report to the Executive Director.

Coordinator of State Salvage Act

The Coordinator of State Salvage Act will coordinate Museum Commission activities related to the retrieval of fossil resources beneath the state's navigable waterways. This person will hire and supervise the work of the Dive Team Supervisor and the Divers, will recommend equipment purchases to carry out the program, and will serve as a liaison between the Museum Commission and the diving community of the state. He or she will establish program priorities and will prepare operating budgets for this work. Because this person will also take part in diving activities when required, he or she must be a certified diver.

The Coordinator of State Salvage Act will report to the Executive Director.

Accounts Clerk

The Accounts Clerk will essentially perform all the routine duties of a book-keeper, handling accounts receivable and payable and assisting the Deputy Director of Business with the record keeping required to report the financial status of both private and government grants for special programs. The Accounts Clerk also will assist the Deputy Director of Business with the preparation of comprehensive annual operating budgets, the forecasting of future revenue and changes in financial condition, and any other work requiring the accounting skills of a well trained bookkeeper. The Accounts Clerk will maintain all bookkeeping records in accordance with accounting principles established by the State for non-profit institutions and will assist with the financial work involved with the preparation of grant applications.

The Accounts Clerk will supervise the work of the Assistant Accounts Clerk and will report to the Deputy Director of Business.

Museum Store Manager

The Museum Store Manager will be responsible for the coordination of all Museum Store activities and for the selection and purchase of merchandise to be sold. In addition to being a revenue producing operation, the Museum Store should be treated as an extension of the visitor's total educational experience at the State Museum. To this end, the Museum Store Manager should see to it that the image of the Store, its inventory, and displays are consistent with that of the rest of the Museum's public areas. The Museum Store Manager will consult with the Director of Exhibits and the Graphic Designer for the installation of special lighting, fabrication of display cases, and the preparation of all graphics for that area and will consult with the Executive Director regarding the selection of merchandise.

Specific responsibilities of the Museum Store Manager will be to order merchandise, supervise the receiving, pricing, and marking of such merchandise, arrange the displays, supervise inventory control, and analyze merchandise to consider the expansion or curtailment of certain types of inventory items. The Museum Store Manager also will supervise the filing of mail orders and check daily cash receipts to reconcile them with cash register readings. It will be the responsibility of the Museum Store Manager to develop, coordinate, and administer the operating budget of the Museum Store for review by the Deputy Director for Business and to train and supervise the work of volunteers assisting with Museum Store operations.

The Museum Store Manager will report directly to the Deputy Director for Business, who will coordinate and supervise his or her work.

Building and Grounds Maintenance Supervisor

The Building and Grounds Maintenance Supervisor will be responsible for the maintenance and care of the entire Museum facility, including the building and all its mechanical equipment, the outdoor exhibit areas, the parking area, and the rest of the grounds. This person will direct and supervise all custodial and grounds work done by the Maintenance Mechanic, the Carpenter/Painter, and contracted from General Services. The Building and Grounds Maintenance Supervisor will see to it that all service contracts for the mechanical equipment of the facility are properly executed and that these contracts are renewed on a timely basis.

The Building and Grounds Maintenance Supervisor will report to the Deputy Director of Business.

Maintenance Mechanic

The Maintenance Mechanic will be responsible for day-to-day care and maintenance of the building's mechanical and electrical equipment and of any Museum vehicles. It will be this person's responsibility to monitor the mechanical and electrical equipment and to report major problems to the Building and Grounds Supervisor on a timely basis. This person also will assist with the monitoring of fire protection and security systems and alert the Chief of Security to any problems regarding these vital systems.

The work of the Maintenance Mechanic will be coordinated and supervised by the Building and Grounds Supervisor.

Chief of Security

Working with the Deputy Director for Business and the Building and Grounds Supervisor, the Chief of Security will establish standards for all security and public safety matters involving the building, the Museum collections, and the grounds. Once these standards have been established, the Chief of Security will see to it that all rules are strictly adhered to by the staff and visitors to the Museum and that the grounds and building are safe for occupancy by the staff, visitors, and the Museum's permanent and temporary collections.

The Chief of Security will make routine inspections of the Museum's security and fire protection systems to insure that they are in good working order at all times. It will be the responsibility of the Chief of Security to train the security staff in all phases of their work and to familiarize them with the operation of the Museum's security and fire protection systems, to assign the security personnel to their various posts, and to keep time and attendance records of these staff members.

The Chief of Security will report directly to the Deputy Director for Business.

Security Officers

The Security Officers will perform traditional guard functions to insure the safety of Museum visitors, staff, and the valuable objects displayed or stored in the facility. They should be thoroughly familiar with the Museum's collection storage areas, exhibition areas, and the grounds, the location of fire extinguishers and fire alarms, and they should be completely familiar with the operation of the Museum's security system.

The Security Officers also should be trained to observe visitor reactions to the exhibitions and report this information to the Director of Exhibits and the Director of Educational Programs. This valuable criticism will allow the Museum to continually improve the content and presentation of changing exhibitions and avoid a repetition of specific exhibition problems. Although this is not a typically assigned task for Security Officers, this kind of involvement with the Museum, its visitors, and their reactions will add a significant dimension to the Security Officers' identification with the Museum.

The Security Officers will be trained, supervised, and scheduled by the Chief of Security, assisted by the Assistant Chief of Security.

Facility Program

Introduction

This section of the report contains a quantitative analysis of the space needs for the Education, Exhibition, Collection, Research and Publication, State-Wide Services, and Underwater Fossil Management Programs described in Section 2 - Programs.

The <u>Summary of Program Areas</u> divides the Museum spaces into nine categories: Visitor Service Facilities, Exhibition Areas, Education Facilities, Collection Facilities, Administrative Facilities, Exhibition Support Facilities, Building Service Facilities, Aerial Tramway Terrace (Upper Station), and Parking. The summary also lists the individual spaces within each of these categories and gives their net area. The net area is defined as usable space. It does not include wall thicknesses, circulation areas, etc. The gross area, which is used to determine estimates of probable construction cost, is defined as the measurement of the building from the exterior surfaces of the exterior walls.

Also included in this section are <u>Facility Program Design Criteria</u> describing accessibility requirements, special mechanical and electrical provisions, recommended lighting and acoustical treatment, necessary furnishings and equipment, room finishes, etc., of each space in the <u>Summary of Program Areas</u>.

A <u>Program Organization Diagram</u> completes this section. This diagram illustrates the interrelationships that establish the basis for the design of the building so that it will function most efficiently.

Summary of Program Areas			Net Sq.Ft.
1.	Visitor Service Facilities		
	1.1	Lobby	2,000
	1.2	Multi-Purpose Meeting Room	3,200
	1.3	Budget Fast Food Dining Room	2,400
	1.4	Kitchen	800
	1.5	Museum Store, including Store Manager's Office, Inventory Storage, Publication Storage, and Mailing Area	2,400
	1.6	Rental/Sales Gallery	900
	1.7	Special Audience Orientation Room	300
	1.8	Locker Area	150
	1.9	Coat Storage for School Groups	450
	1.10	Coat Check Room	300
	1.11	First Aid Room	120
	1.12	Public Toilets	1,500
	1.13	Ticketing/Information/Control Area	150
	Subtotal		14,670
2.	. Exhibition Areas		
	2.1	Exhibition Areas Foyer	1,000
	2.2	Orientation Theater	1,500
	2.3	Long Term Exhibition Areas	62,500
	2.4	Temporary Exhibition Areas	15,000
	2.5	Outdoor Exhibition Areas	
	Subto	tal	80,000

3.	Educ	ation Facilities	
	3.1	Classrooms (2 at 900 sq.ft. each)	1,800
	3.2	Education Storage	900
	3.3	Auditorium (300 seats)	5,600
	3.4	Office for the Director of Educational Programs	200
	3.5	Offices for Educational Program Staff (2 at 150 sq.ft. each)	300
	3.6	Offices for Lecturer/Demonstrators (2 at 100 sq.ft. each)	200
	3.7	Volunteer Lounge and Toilets	600
	Subt	otal	9,600
4.	Coll	ection Facilities	
	4.1	Collection Receiving Area	600
	4.2	Crate Storage and Packing	500
	4.3	Fumigation Area	120
	4.4	Registration Area	1,200
	4.5	Photographic Studio	800
	4.6	Conservation Laboratory	1,500
	4.7	Research Area (including Library Stack Area and Librarian's Office)	1,650
	4.8	Secretarial Area	200
	4.9	Curators' Offices (5 at 150 sq.ft. each)	750
	4.10	Researchers' Work Cubicles (3 at 100 sq.ft. each)	300
	4.11	Animal Room	150
	4.12	Staff Toilets and Showers	200
	4.13	Collection Storage Areas	15,000
	Subto	tal	22,970

5.	Administrative Facilities			
	5.1	Reception Area	150	
	5.2	General Secretarial Work Area	400	
	5.3	Staff Assistant's Office	150	
	5.4	Executive Director's Office	300	
	5.5	Office for Deputy Director of Programs	200	
	5.6	Office for Deputy Director of Business	150	
	5.7	Accounting Clerk's Office	150	
	5.8	Office for the Director of State- Wide Services	200	
	5.9	Office for the Assistant of State- Wide Services	100	
	5.10	Work Area for State Salvage Act Coordinator	75	
	5.11	Office for Public Information Director	150	
	5.12	Conference/Board Room	800	
	5.13	Staff Lounge	350	
	5.14	Staff Toilets	150	
	5.15	Copier Room and Office Supply Storage Area	100	
	Subtotal		3,425	
_	n. h.i	hitian Compant Facilities		
6.	EXNI	bition Support Facilities		
	6.1	Office for Director of Exhibits	200	
	6.2	Exhibit Staging Area	1,200	
	6.3	Exhibit Design Area	350	
	6.4	Graphic Production Area	350	
	6.5	Silkscreen Work Area and Darkrooms	700	

6.	Exhi	bition Support Facilities (continued)	
	6.6	Exhibit Workshop and Storage	1,500
	6.7	Painting Area and Spray Booth	350
	6.8	Audio-Visual Workroom	400
	6.9	Exhibition Prop Storage	1,000
	6.10	Storage Area for Traveling Exhibits and Suitcase Exhibits	2,000
	Subto	tal	8,050
7.	Buil	ding Service Facilities	
	7.1	Custodial Storage	300
	7.2	Security Office and Guard Room	200
	7.3	Outdoor Maintenance Storage	500
	7.4	Mechanical and Electrical Rooms	6,000
	7.5	Building Supervisor's Office	150
	7.6	General Receiving Area	450
	Subt	otal	7,600
8.	Aeri	al Tramway Terrace (Upper Station)	
	8.1	Aerial Tramway Terrace	
9.	Park	ing	
	9.1	Parking for 500 Cars	
TOT	AL NET	AREA	146,315
TOTAL GROSS AREA (Net Area x Approximately 1.3)			190,000

Facility Program Design Criteria

1. Visitor Service Facilities

Net Sq.Ft.

1.1 Lobby

2,000

Function: This is the first area entered by the Museum visitor and serves as a connecting space for several visitor service facilities.

- .1 This area should have direct access from a covered portico area for visitors arriving by car or bus. In addition, there should be entry points for visitors arriving by aerial tramway or the pedestrian connection to the Riverbanks Zoo.
- .2 The following areas should be accessible from the Lobby: Ticketing/Information/Control Area, Locker Area, Coat Storage for School Groups, First Aid Room, Public Toilets, Museum Store, Rental/Sales Gallery, Coat Check Room, Multi-Purpose Meeting Room, Budget Fast Food Dining Room, Special Audience Orientation Room, Auditorium, and Classrooms.
- .3 The visitor should have controlled access to the Administrative Facilities, Collection Facilities, and Exhibition Support Facilities without passing through the controlled Exhibition Areas.
- .4 Orientation graphics and/or model of public areas of the Museum should be displayed in this area.
- .5 Bulletin board.
- .6 Seating for ten.
- .7 Water fountains suitable for children and adults and accessible to the handicapped.
- .8 Natural light and a permanent incandescent lighting system supplemented by track lighting to illuminate displays.
- .9 Flooring hard surface (quarry tile, terazzo, etc.)
- .10 Public telephones accessible to the handicapped.

1.2 Multi-Purpose Meeting Room

Function: Area to serve as a multi-purpose room to be used for exhibit opening receptions, club meetings (historical, science, art, etc.), educational programs, school group orientation and assembly, science fairs and demonstrations, and other similar type functions.

Requirements:

- .1 Access to a controlled area.
- .2 Access to kitchen area for cafeteria style service or catering.
- .3 Seating for 150 people at tables.
- .4 Stacking tables and chairs.
- .5 Ability to close off the food serving area from the rest of the room.
- .6 Chair and table storage immediately adjacent to the room (300 sq.ft.).
- .7 Small, raised, portable stage area 12 ft. deep by 20 ft. wide.
- .8 Projection screen and audio-visual projection equipment recessed in wall.
- .9 Natural light and views.
- .10 Provision for screening off windows to darken room for audio-visual presentations.
- .11 Voice reinforcement system.
- .12 Dimmable incandescent lighting.
- .13 Flooring carpet.

3,200

1.3 Budget Fast Food Dining Room

2,400

Function: Area to serve fast food type refreshments for large groups of visiting school children and family groups. This area also will be used for visiting school groups to sit and eat lunches they have brought with them on their field trips.

Requirements:

- .1 Access to kitchen area for cafeteria style service.
- .2 Seating for 150 people at tables.
- .3 Natural light and pleasant views.
- .4 Incandescent lighting.
- .5 Hard surface flooring (quarry tile, terazzo, vinyl tile, or seamless flooring).

1.4 Kitchen 800

Function: Area for the preparation of light snacks and fast food to be served in the Budget Fast Food Dining Room and in the Multi-Purpose Room. This area also will function as a caterer's kitchen for special dinners.

- .1 Adjacent to both dining areas.
- .2 Accessible to the General Receiving Area.
- .3 Two gas stoves or microwave ovens.
- .4 Large refrigerator.
- .5 Freezer.
- .6 Dishwasher.
- .7 Storage for dishes and supplies.
- .8 Fluorescent lighting.
- .9 Flooring hard surface (quarry tile, terazzo, vinyl tile, or seamless flooring).
- .10 Telephone.

1.5 Museum Store

2,400

Function: Area for the sale of books, posters, cards, crafts, games, etc., related to the Museum's Exhibition and Education Programs; inventory storage; and storage of the Museum's publications.

- .1 Sales Area: (1,500 sq.ft.)
 - .1 Directly accessible from the Lobby.
 - .2 One section of the Sales Area should be zoned for the sale of articles for children.
 - .3 Glass top display cases with storage units below.
 - .4 Vertical hanging space behind display cases and along walls.
 - .5 Book display area.
 - .6 Poster display area.
 - .7 Card display area.
 - .8 Indirect fluorescent lighting supplemented with incandescent spotlighting.
 - .9 Flooring carpet.
- .2 Inventory Storage Area: (450 sq.ft.)
 - .1 Adjacent to Sales Area and General Receiving Area.
 - .2 One-to two-ft. wide shelving on walls and/or in freestanding units.
 - .3 High security storage for cash.
 - .4 Indirect fluorescent lighting.
 - .5 Flooring sealed concrete.

1.5 Museum Store (continued)

- .3 Store Manager's Office: (100 sq.ft.)
 - .1 Accessible to Inventory Storage Area.
 - .2 Desk with typing extension and chair.
 - .3 Two 4-drawer file cabinets.
 - .4 Shelving.
 - .5 Indirect fluorescent lighting.
 - .6 Flooring carpet.
 - .7 Telephone.
- .4 Publication Storage: (250 sq.ft.)
 - .1 Easily accessible from the General Receiving Area.
 - .2 Two-ft. deep adjustable metal shelving with 3-ft. access aisles.
 - .3 Indirect fluorescent lighting.
 - .4 Flooring sealed concrete.
- .5 Mailing/Work Area: (100 sq.ft.)
 - .1 Accessible to Inventory and Publication Storage Areas and General Receiving Area.
 - .2 Work counter along wall with storage cabinet below.
 - .3 Scale/postage meter.
 - .4 Shelving around walls.
 - .5 Storage space for packaging materials.
 - .6 Indirect fluorescent lighting.
 - .7 Flooring sealed concrete.

1.6 Rental/Sales Gallery

900

Function: Area for the rental or sale of paintings, drawings, prints, or other works of art.

Requirements:

- .1 Access to this area should be from the Museum Store.
- .2 Wall hanging space for framed works of art.
- .3 Sliding rack storage for framed works of art.
- .4 Poster type display units for unframed works of art.
- .5 Flat file cabinets for the storage of unframed works of art.
- .6 Indirect fluorescent lighting supplemented by special lighting to illuminate the works of art.
- .7 Flooring carpet.

1.7 Special Audience Orientation Room

300

Function: An area where handicapped Museum visitors can learn about the building, its exhibitions, the location of the visitor service facilities, and the easiest route to get from one place to another for different types of handicapped persons.

- .1 Directly accessible to the Lobby.
- .2 Provision for audio-visual presentations.
- .3 Flooring carpet.
- .4 Flexible lighting system.

1.8	Locker Area	150
	Function: Area for the visitors to store packages, bags, coats, etc.	
	Requirements: ·	
	.1 Accessible to the Lobby.	
	.2 Fifty 24-inhigh by 15-inwide vertical coin- operated lockers.	
1.9	Coat Storage for School Groups	450
	Function: Facilities for visiting school groups to hang up their coats before proceeding through the Exhibition Areas.	
	Requirements:	
	.1 Accessible to the Lobby.	
	.2 Ten pull-out coat storage racks (4 ft. wide by 6-1/2 ft. long) stored in the wall. Each rack to hold fifty coats. Accessible by two busloads of school children at a time.	
	.3 Area must be provided in front of the racks for access.	
1.10	Coat Check Room	300
	Function: This room should function as a self-service coat-hanging area or be used with an attendant for special occasions.	
	Requirements:	
	.l Accessible to Lobby.	
	.2 Hanging space for 300 coats.	
	.3 Storage for umbrellas and packages.	
	.4 Storage area for five collapsible wheel chairs and ten collapsible strollers for use by Museum visitors.	

.6 Flooring - hard surface (terazzo, vinyl tile, or

.5 Fluorescent lighting.

seamless flooring).

1.11 First Aid Room

120

Function: To provide assistance to the Museum visitor.

Requirements:

- .1 Accessible to the Lobby.
- .2 Two cots and a portable screen.
- .3 Sink and storage area for first aid equipment and supplies.
- .4 Lavatory and water closet.
- .5 Incandescent lighting.
- .6 Flooring hard surface (quarry tile, terazzo, vinyl tile, or seamless flooring).
- .7 Telephone.

1.12 Public Toilets

1,500

Function: Toilet facilities for the Museum visitor.

- .1 One set of public toilets should be accessible to the Lobby and one set should be accessible from each level of the Exhibition Areas.
- .2 Total men's facilities: Five urinals, eleven water closets, and eight lavatories with mirrors over the lavatories.
- .3 Total women's facilities: Sixteen water closets and eight lavatories with mirrors over the lavatories.
- .4 One water closet and lavatory in each men's and women's room must be accessible to the handicapped, and all public toilet rooms must be accessible to the handicapped.
- .5 Indirect fluorescent lighting.
- .6 Flooring hard surface (quarry tile, terazzo, or seamless flooring).

1.13 Ticketing/Information/Control Area

150

Function: Area to give information to visitors about the Museum, memberships, and to sell admission and aerial tramway tickets.

Requirements:

- .1 This area should be located adjacent to the Lobby.
- .2 Area should be provided for a ticket seller and a person who could sell memberships, provide information about the benefits of membership and the Museum, and about Columbia and the surrounding areas. Space should be provided for an additional person on peak attendance days.
- .3 This area should contain a cash register, telephone, and storage space for pamphlets, maps, etc.

SUBTOTAL NET AREA:

14,670

2. Exhibition Areas

Net Sq.Ft.

2.1 Exhibition Areas Foyer

1,000

Function: Gathering Area for Museum visitors before entering either the Orientation Room or the Exhibition Areas.

Requirements:

- .1 Both the Orientation Room and the other Exhibition Areas should be located directly off of this space.
- .2 Permanent indirect lighting system supplemented by track lighting to illuminate displays and graphics.
- .3 Ceilings should contain acoustically absorbent material.
- .4 Flooring carpet.

2.2 Orientation Theater

1,500

Function: This area should serve to introduce visitors to the Museum and its exhibit areas by means of slide and audio presentations and exhibits and graphics. Among the various shows to be presented in this area would be a 5- to 10-minute orientation program to provide visitors with an introduction to the subject matters of the Museum and an overview of the exhibition sequence. This introduction will give visitors a framework into which they can place all that they will see at the Museum, thus making their visit more meaningful.

- .1 The visitor should have the option of either entering this area immediately after passing through the Ticketing/Information/Control Area or going directly into the Exhibition Areas.
- .2 Area for seating up to 100 persons: (1,350 sq.ft.)
- .3 Projection booth for front-screen projection, with three double-stacked 35 mm. slide projectors and two 16 mm. motion picture projectors: (150 sq.ft.)

2.2 Orientation Room (continued)

- .4 Stereophonic sound system.
- .5 Special areas should be provided to hold collection artifacts that will be spotlighted during the audio-visual presentations.
- .6 Separate entry and exit with light lock.
- .7 Carpeted, sloped floor.
- .8 Area for the handicapped.
- .9 Flexible incandescent track lighting.
- .10 Fixed dimmable incandescent lighting system.

2.3 Long Term Exhibition Areas

62,500

Function: Exhibition areas for long term natural history, cultural history, technology, and arts and crafts exhibits related to the State of South Carolina.

- .1 The visitor should have the option of either entering these areas directly after passing through the Ticketing/Information/Control Area or after visiting the Orientation Room.
- .2 There should be a major circulation area to serve as a means of orientation and connection of the primary Long Term Exhibition Areas. This major circulation area should contain clear graphics to delineate the primary Long Term and Temporary Exhibition Areas.
- .3 The exhibition areas should be planned to avoid long exhibit sequences so that the visitor will be able to maintain contact with a basic point of orientation.
- .4 The traffic patterns through the exhibition areas should provide for spatial changes and recognize peak visitor load requirements.

2.3 Long Term Exhibition Areas (continued)

- .5 Multi-level exhibit areas should be provided to allow the visitor to view large exhibits from more than one vantage point. These levels should always be connected by ramps and/or an elevator.
- .6 There should be a range in the size of exhibit objects to provide a continuous change of pace for the visitor.
- .7 Ceiling heights should vary from a minimum of 10 ft. to a maximum of 45 ft. The different ceiling heights should be coordinated with the exhibits.
- .8 Natural light should be excluded from most of the Long Term Exhibition Areas, although controlled indirect natural light should be provided in the fine art areas. Natural light and controlled views may be coordinated with some exhibit areas for related views of the site and/or a change of pace from the "black box" environment.
- .9 A flexible exhibit lighting system should be provided within the exhibition areas.
- .10 A permanent lighting system for cleaning operations should be separately switched from the exhibit lighting circuits.
- .11 An electrical power system should be provided consisting of a grid pattern 8 ft. on center.
- .12 The ability to install audio-visual systems throughout the exhibition areas, which can be integrated with the exhibits, should be provided.
- .13 Ceilings should contain acoustically absorbent materials.
- .14 Flooring to be carpeted, except where special flooring may be used in conjunction with a particular exhibit.
- .15 Seating areas should be included at intervals throughout the exhibition sequence.
- .16 Raised demonstration areas should be provided at intervals throughout the exhibition sequence.
- .17 Floor loading should be 150 lbs./sq.ft. throughout and designed for fork-lift truck operation throughout.

2.4 Temporary Exhibition Areas

15,000

Function: Exhibition areas for changing natural history, cultural history, technology, and art exhibitions related to the state of South Carolina.

- .1 A variety of sizes of exhibit galleries should be provided. These should range from approximately 1,000 sq.ft. to 4,000 sq.ft.
- .2 The galleries should be arranged in such a manner that several can be combined for a particularly large temporary exhibit.
- .3 Ceiling heights of the individual galleries should range from 12 to 20 ft.
- .4 A permanent lighting system for cleaning operations should be separately switched from the exhibit lighting circuits.
- .5 The electrical power system in the exhibit galleries should consist of a grid pattern 8 ft. on center and a plug-in bus duct system on the ceiling 8 ft. on center.
- .6 Ceilings in these exhibit areas should be finished with acoustically absorbent material.
- .7 Each area for temporary exhibitions should be provided with a telephone jack outlet for easy communication with the staff when a new exhibit is being installed.
- .8 Security should be provided for transitional periods.
- .9 No natural light should enter the Temporary Exhibition Areas, except the Temporary Fine Arts areas. This light should be indirect and completely controllable.
- .10 A flexible incandescent track lighting system should be provided.
- .11 Flooring carpet.
- .12 Floor loading should be 150 lbs./sq.ft. throughout and designed for fork-lift trucks throughout.

2.5 Outdoor Exhibition Areas

Function: Area for the display of outdoor exhibits related to the indoor exhibition areas. Outdoor exhibit areas should be of two types: one type should be controllable areas directly accessible from the indoor exhibition areas, with access only from these indoor exhibit areas. The other type should be accessible from nature trails on the site and should relate primarily to the natural and historic features of the site.

Requirements:

- .1 Outdoor exhibition areas should be provided to relate to each discipline of the Museum's Exhibition Program.
- .2 Nature trails for the Museum's natural and cultural history Education Programs should be provided.
- .3 Demonstration areas for crafts, cooking, dancing, and musical events should be provided.
- .4 Security should be provided for the Outdoor Exhibition Areas.
- .5 Electrical power.
- .6 Water service.
- .7 Night lighting.

SUBTOTAL NET AREA:

80,000

Education Facilities

Net Sq.Ft.

3.1 Classrooms (2 at 900 sq.ft. each)

1,800

Function: Areas to carry out one portion of the Museum's Education Program.

- .1 These areas should be relatively accessible to the Lobby.
- .2 These areas should be usable without opening the rest of the Museum.
- .3 It should be possible to combine these two classrooms to create one space.
- .4 Ceiling height should be approximately 11 ft.
- .5 Electrical convenience outlets should be located approximately 4 ft. on center around the perimeter of each room and a 110/220-volt underfloor duct system should be provided down the center of each room.
- .6 Sink and gas service in each classroom.
- .7 Roll-down projection screen.
- .8 Tack surfaces or chalkboards on the walls.
- .9 Portable raised platform in each classroom.
- .10 General indirect fluorescent lighting supplemented by incandescent track lighting.
- .11 The main flooring surface should be carpet with a hard surface around a wet area located within each classroom.

3.2 Education Storage

900

Function: Storage area for demonstration objects, supplies, equipment, and collection objects to be used in the Museum's Education Programs.

Requirements:

- .1 This area should be easily accessible to the Classrooms.
- .2 Adjustable shelving 2 ft. deep and 4 ft. wide.
- .3 Two 2 ft. by 3 ft. by 6 ft. lockable storage cabinets.
- .4 Incandescent lighting.
- .5 Flooring sealed concrete.

3.3 Auditorium

5,600

Function: Area to carry out the Museum's education and ancillary programs, for live and video taped local television shows, and for use by outside groups on a rental basis.

- .1 Sloped floor with fixed auditorium seating for 300 at 15 sq.ft./person (4,500 sq.ft.)
- .2 Accessible from the Lobby so that the Auditorium can be used without opening up the Exhibition Areas.
- .3 Projection booth and storage for films, slides, and audio-visual equipment (100 sq.ft.)
- .4 Stage area adequate for rear-screen projection (1,000 sq.ft.)
- .5 Light lock at entry doors to act as a light barrier.
- .6 Acoustical isolation from outside areas. Appropriate acoustical treatment for speech, audiovisual presentations, and small concerts.

3.3 Auditorium (continued)

- .7 Stereophonic sound system for films and music programs.
- .8 Adjustable stage lighting separate from general room lighting.
- .9 Dimmable incandescent lighting.
- .10 Flooring carpet.

3.4 Office for the Director of Educational Programs

200

Function: Office for the Director of Educational Programs.

Requirements:

- .l Convenient access to Education Program staff and volunteer work areas and the Classrooms.
- .2 Desk with typing extension and chair.
- .3 Work table with chairs.
- .4 Two lounge chairs.
- .5 Two 4-drawer file cabinets.
- .6 Six ft. of shelving on wall.
- .7 Indirect fluorescent lighting supplemented by incandescent task lighting.
- .8 Natural light.
- .9 Flooring carpet.
- .10 Telephone.
- 3.5 Offices for Education Program Staff (2 at 150 sq.ft. each) 300

Function: Offices for Education Program Staff.

Requirements:

.1 Conveniently accessible to the Director of Education and the Lecturer/Demonstrators' offices.

3.5 Of	fices	for	Education	Program	Staff	(continued)
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- .2 Desk with typing extension and chair.
- .3 Two chairs.
- .4 Shelving.
- .5 Two 4-drawer file cabinets.
- .6 Indirect fluorescent lighting with incandescent task lighting.
- .7 Flooring carpet.
- .8 Telephone.

3.6 Offices for Lecturer/Demonstrators (2 at 100 sq.ft. each) 200

Function: Offices for Lecturer/Demonstrators

Requirements:

- .1 Conveniently accessible to the Director of Educational Programs and Education Program staff.
- .2 Desk with typing extension and chair.
- .3 Two chairs.
- .4 Shelving.
- .5 Two 4-drawer file cabinets.
- .6 Flooring carpet.
- .7 Telephone.

3.7 Volunteer Lounge and Toilets

600

Function: Informal lounge/eating area and toilet facilities for Museum volunteers.

- .1 Convenient to the Lobby.
- .2 Table and chairs to seat fifteen.

3.7 Volunteer Lounge and Toilets (continued)

- .3 Lounge for seating six.
- .4 Small refrigerator, sink, hot plate, and work surface.
- .5 Convenience outlets at counter-top height and floor level.
- .6 Cabinets.
- .7 Tack surface on one wall.
- .8 Coat hanging area.
- .9 Twenty-five lockers.
- .10 Indirect fluorescent lighting.
- .11 Flooring carpet.
- .12 Telephone.

SUBTOTAL NET AREA:

9,600

4. Collection Facilities

Net Sq.Ft.

4.1 Collection Receiving Area

600

Function: This is an area for the receiving and shipping of collection artifacts and art works.

Requirements:

- .1 Accessible to the General Receiving Area.
- .2 Access to Fumigation Area.
- .3 Double doors to permit passage of large crates (clear dimension 7 ft. wide by 7 ft. high) with removable transom to increase opening to 10 ft. high.
- .4 Two 4 ft. by 8 ft. work tables, one with padding.
- .5 One counter 36 in. deep by 10 ft. long with cabinets underneath for storage of tools, rolls of plastic, etc.
- .6 Area for the storage of a 4 ft. by 3 ft. flatbed cart, hand truck, and dolley.
- .7 A sealed cabinet with adjustable shelving for contaminated objects awaiting fumigation.
- .8 Direct fluorescent lighting.
- .9 Flooring sealed concrete.
- .10 Telephone.

4.2 Crate Storage and Packing Area

500

Function: Area for storage of crates used in shipping the Museum's collections or traveling exhibits and for crating and uncrating of collections.

- .1 This area should be accessible to the Collection Receiving Area.
- .2 Area should be provided for the stacking of crates.

4.2 Crate Storage and Packing Area (continued)

- .3 Double doors to permit passage of large crates (clear dimension 7 ft. wide by 7 ft. high).
- .4 Adequate security should be provided.
- .5 Direct fluorescent lighting.
- .6 Table and work space.
- .7 Storage space for packaging materials.

4.3 Fumigation Area

120

Function: This is an area to contain the fumigation chamber.

Requirements:

- .1 This area should be located adjacent to the Collection Receiving Area.
- .2 Provision must be made for adequate venting from this area to meet or surpass all code requirements.

4.4 Registration Area

1,200

Function: This area is for the processing of collection objects, including accessioning, out-loans, in-loans, and items being held on a temporary basis awaiting conservation, photography, etc. This area should control access to the Research Area, Conservation Lab, Photographic Studio, and Curatorial Offices.

- .1 This area should be accessible to the Collection Receiving Area.
- .2 Desk with typing extension.
- .3 Four 4 ft. by 8 ft. work tables.
- .4 Four supply cabinets 3 ft. wide by 2 ft. deep by 2-1/2 ft. high to fit under the work tables.

4.4 Registration Area (continued)

- .5 Twenty lin.ft. of 2 ft. deep shelving, five shelves high, and 20 lin.ft. of 1 ft. deep shelving, five shelves high, for temporary holding of objects to be accessioned.
- .6 Two 8 ft. high by 10 ft. long wire hanging racks for two-dimensional objects.
- .7 Two 2 ft. by 4 ft. mobile carts and two 18 in. by 36 in. mobile carts.
- .8 A security vault for records with 4-hour rated construction, and an area of 150 sq.ft. The vault should contain twelve 4-drawer file cabinets.
- .9 Sink for hand washing.
- .10 Double doors from both the Collection Receiving Area and Collection Storage Area (clear dimension 7 ft. wide by 7 ft. high).
- .11 Indirect fluorescent lighting.
- .12 Flooring sealed concrete.
- .13 Telephone.

4.5 Photographic Studio

800

Function: This is an area for the photography of objects to be accessioned, exhibited, loaned, published, and conserved. Darkroom facilities are provided within the Exhibition Preparation Facilities.

- .1 Minimum clear ceiling height of 12 ft.
- .2 Double doors providing a total clear opening of 7 ft. by 7 ft.
- .3 Three large cabinets for the storage of photographic equipment.
- .4 Desk/work area for Photographic Technician.
- .5 Overhead bar system with provision for power for lights.

4.5 Photographic Studio (continued)

- .6 Electric outlets along the wall 3 ft. on center.
- .7 Adequate ventilation and temperature control to offset heat generated by the lights.
- .8 Flooring sealed concrete.
- .9 Telephone.

4.6 Conservation Laboratory

1,500

Function: This area is for the conservation of the Museum's cultural history, natural history, and science collections and to assist other museums in the State with the conservation of their collections in these disciplines.

- .1 This area should exist on the secure side of the Registration Area.
- .2 Double door access to the area (clear dimension 7 ft. wide by 7 ft. high).
- .3 Minimum ceiling height of 11 ft.
- .4 ll0/220 volt electrical service with continuous plugmold strip at counter height and 6 in. off the floor around the perimeter of the room.
- .5 Provision for access to gas line, compressed air, distilled and de-ionized water sources.
- .6 Floor drain.
- .7 A heavy duty fume hood with ducting to individual work areas. Work surfaces should be height adjustable to accommodate different sizes of objects being worked on.
- .8 All walls in this area to have a nailable surface (3/4 in. plywood over strapping).
- .9 Twenty lin.ft. of work counter along one wall. A minimum of three work stations along the work counter. One work station should be equipped for microscopic examination.

4.6 Conservation Laboratory (continued)

- .10 Ten lin.ft. of 1 ft. deep shelving with 1 ft. deep storage cabinets below and 10 lin.ft. of 2 ft. deep shelving with 2 ft. deep storage cabinets below.
- .11 One lockable fireproof cabinet for storage of flammable or poisonous chemicals.
- .12 A small refrigerator for chemical storage.
- .13 A 2-1/2 ft. by 2-1/2 ft. sink, with filtered and temperature controlled water for washing of textiles and other materials, and a utility sink with standard faucet.
- .14 Asbestos surface for hot plates.
- .15 Two 4 ft. by 8 ft. work tables in the center of the room.
- .16 One 10 ft. by 10 ft. movable wash table for fabric/quilt washing.
- .17 A desk with a typing extension, a chair, and a file cabinet.
- .18 Indirect fluorescent lighting for overall illumination, supplemented with adjustable incandescent track lighting on the ceiling. Track lighting approximately 6 ft. on center.
- .19 Flooring sealed concrete.
- .20 Telephone.

4.7 Research Area

1,650

Function: Area for staff and outside scholars to examine and do research on the Museum's collections and where visitors can bring in objects for identification and advice regarding conservation.

Requirements:

.l Accessible to the Collection Storage Areas.

4.7 Research Area (continued)

- .2 Research Room: (1,200 sq.ft.)
 - .1 Adjacent to the Curators' Offices and the Researchers' work cubicles.
 - .2 Four tables 3 ft. by 5 ft. with sixteen chairs.
 - .3 Four study carrels with chairs.
 - .4 Lockable storage cabinets for the secure storage of objects undergoing research.
 - .5 Listening area with headsets for records and tapes.
 - .6 Light table and viewing area for the projection of slides.
 - .7 Shelving for reference books.
 - .8 Natural light.
 - .9 Indirect fluorescent lighting with incandescent task lighting.
 - .10 Flooring carpet.
 - .11 Telephone.

.3 Librarian's Office: (150 sq.ft.)

- .1 Accessible to the Research Room and with visual control of the Library Study Area.
- .2 Desk with typing extension and chair.
- .3 Two chairs.
- .4 Six 4-drawer file cabinets.
- .5 One credenza 30 in. wide by 20 in. high by 10 ft. long.
- .6 Twenty lin.ft. of shelving for rare book storage.
- .7 Indirect fluorescent lighting with incandescent task lighting.
- .8 Flooring carpet.
- .9 Telephone.

4.7 Research Area (continued)

- .4 Library Stack Area: (300 sq.ft.)
 - .1 Adjacent to the Librarian's Office.
 - .2 Shelving for book and periodical storage.
 - .3 Lockable cabinets for the storage of audio tapes.
 - .4 Lockable cabinets for the storage of the Museum's slide collection.
 - .5 Lockable file cabinets for the storage of the Museum's archival photographic collection.
 - .6 Indirect fluorescent lighting.
 - .7 Flooring carpet.

4.8 Secretarial Area

200

Function: Work area for secretary to assist the curatorial staff.

Requirements:

- .1 This area should control access to the Curators' Offices and Research Area.
- .2 Desk with typing extension and chair.
- .3 Two 4-drawer files.
- .4 Shelving.
- .5 Indirect fluorescent lighting with incandescent task lighting.
- .6 Flooring carpet.
- .7 Telephone.

4.9 Curator's Offices (5 at 150 sq.ft. each)

750

Function: Office and work area for the Curators or their assistants.

4.9 Curator's Offices (continued)

Requirements:

- .1 These offices should be located adjacent to the Research Area on the secure side of the Registration Area.
- .2 Desk with typing extension and chair.
- .3 Six ft. of shelving on the wall.
- .4 One 2-drawer file cabinet.
- .5 One credenza 30 in. deep by 30 in. high by 10 ft. long with storage shelving.
- .6 Area for 18 in. by 24 in. mobile cart.
- .7 Tackboard along one wall.
- .8 Natural light controlled by curtains in each office.
- .9 Incandescent lighting.
- .10 Flooring carpet.
- .11 Telephone.
- .12 Lockable doors.

4.10 Researcher's Work Cubicles (3 at 100 sq.ft. each)

300

Function: Research and study rooms to accommodate researchers.

- .1 Adjacent to the Research Area.
- .2 Lockable work areas where research materials can be held without compromising Museum security.
- .3 Desk with typing extension.
- .4 Shelving.
- .5 Indirect fluorescent lighting with incandescent task lighting.

- 4.10 Researcher's Work Cubicles (continued)
 - .6 Flooring carpet.
 - .7 Telephone.

4.11 Animal Room

150

Function: Holding room for animals to be used in the Museum's Education Programs.

Requirements:

- .l Accessible to the Curators' Offices.
- .2 One glass wall with blinds for visual access from outside.
- .3 Special ventilation requirements.
- .4 Water service and sink. Extra water tap in one wall.
- .5 Work counters around three sides of room, two sides with raised front lip and storage below.
- .6 Electrical outlets counter height and 8" above floor.
- .7 Small refrigerator/freezer.
- .8 Natural light.
- .9 Indirect fluorescent lighting with incandescent task lighting.
- .10 Floor drain, sloped floor.
- .11 Telephone.

4.12 Staff Toilets and Shower

200

Function: Toilet and shower facilities for the curatorial staff.

- .1 Two toilets should be provided, located near the Curators' Offices and the Registration Area.
- .2 Each toilet should contain the following: one lavatory, one water closet, and one shower with drying area.

4.13 Collection Storage Areas

15,000

Function: Area for the storage of the Museum's collections.

Requirements:

- .1 The Collection Storage Areas should be divided into five separate and secure rooms. Each should have separate environmental controls for heating, air conditioning, and filtration. Special precautions must be taken to insure that vibration from any source, mechanical, automobile, etc., does not penetrate any of the collection storage rooms.
- .2 Doors into each storage room should be equipped with a magnetic contact switch and by-pass switch mounted adjacent to the door. A remote annunciator to indicate the status of each storage room door should be installed in the Registration Area.

.3 Inorganic Artifact Storage:

.1 A maximum relative humidity of 30% should be maintained with a temperature of 72 degrees F. ±5 degrees F.

.4 Organic Artifact Storage:

.1 A relative humidity range of 45% to 55% should be maintained with a temperature of 72 degrees F. ±5 degrees F.

.5 Painting, Print, and Drawing Storage:

.1 A relative humidity range of 45% to 55% should be maintained with a temperature of 72 degrees F. ±5 degrees F.

.6 High Security Vault Storage:

- .1 A maximum relative humidity of 30% should be maintained with a temperature of 72 degrees F. ±5 degrees F.
- .2 The vault should have a 4-hour fire rating and 24-hour monitoring with a security company.

4.13 Collection Storage Areas (continued)

- .7 Cold Storage Area (for furs, feathers, etc.):
 - .1 A relative humidity range of 45% to 55% with a temperature of 50 degrees F. ±5 degrees F.
- .8 Indirect fluorescent lighting, with individual fixture controls.
- .9 Flooring sealed concrete.
- .10 Telephone.

SUBTOTAL NET AREA:

22,970

5. Administrative Facilities

Net Sq.Ft.

5.1 Reception Area

150

Function: Area for Receptionist/Secretary as well as a waiting area for visitors to the administrative areas. This area controls access to the office areas.

Requirements:

- .1 This area should be accessible to the Museum visitor without having to enter a ticketed area.
- .2 Desk with typing extension for Receptionist/ Secretary and chair.
- .3 Six side chairs and a coffee table for visitors.
- .4 Closet for coats, etc.
- .5 Indirect fluorescent lighting with incandescent lighting for art displayed in area.
- .6 Flooring carpet.
- .7 Telephone.

5.2 General Secretarial Work Area

400

Function: Area for three secretaries and files related to Museum administration.

- .1 Accessible from the Reception Area.
- .2 Three secretarial desks with typing extensions and chairs.
- .3 Ten 4-drawer file cabinets.
- .4 Indirect fluorescent lighting.
- .5 Flooring carpet.
- .6 Three telephones.

5.3 Staff Assistant's Office

150

Function: Office for the Staff Assistant to the Executive Director. This area should control access to the Executive Director's Office.

Requirements:

- .1 Accessible from the Reception Area.
- .2 Secretarial desk with typing extension and chair.
- .3 Two 4-drawer file cabinets.
- .4 Shelving.
- .5 Indirect fluorescent lighting with incandescent task lighting.
- .6 Flooring carpet.
- .7 Telephone.

5.4 Executive Director's Office

300

Function: Office for the Executive Director.

- .l Accessible to the Staff Assistant's Office.
- .2 Executive desk and chair.
- .3 Lounge seating for four with coffee table.
- .4 Credenza 30 in. high by 30 in. deep by 10 ft. long.
- .5 Shelving.
- .6 Two 4-drawer file cabinets.
- .7 Natural light.
- .8 Indirect fluorescent lighting with incandescent task lighting.
- .9 Flooring carpet.
- .10 Telephone.

5.5	off	Office for the Deputy Director of Programs						
	Fun	unction: Office for the Deputy Director of Programs.						
	Req	Requirements:						
	.1	Conveniently accessible to the offices for the Executive Director, Deputy Director of Business, and Staff Assistant.						
	. 2	.2 Executive desk and chair.						
	.3	.3 Lounge seating for two.						
	.4 Credenza 30 in. high by 30 in. deep by 10 ft. long.							
	.5 Shelving.							
	.6 Two 4-drawer file cabinets.							
	.7	.7 Natural light.						
	.8	Indirect fluorescent lighting with incandescent task lighting.						
	.9	.9 Flooring - carpet.						
	.10	Telephone.						
5.6	Off	ice for Deputy Director of Business	150					
Function: Office for the Deputy Director of Business								
	Req	uirements:						
	.1	Accessible from the General Secretarial Work Area.						
	.2 This area should have good access to the Executive Director's Office.							
	.3	Executive desk and chair.						
	.4	Lounge seating for four with coffee table.						
.5 One credenza 30 in. high by 30 in. deep by 10 ft. long								

5.6 Office for Deputy Director of Business (continued)

- .6 Four 4-drawer file cabinets.
- .7 Book shelves along one wall.
- .8 Natural light.
- .9 Indirect fluorescent lighting supplemented by incandescent task lighting.
- .10 Flooring carpet.
- .11 Telephone.

5.7 Accounting Clerks' Office

150

Function: Office for Accounting Clerks.

- .1 Accessible from the General Secretarial Work Area.
- .2 This area should have good access to the Office for the Deputy Director of Business.
- .3 Desk with typing extension and chair.
- .4 Four 4-drawer file cabinets.
- .5 Book shelves along one wall.
- .6 Natural light.
- .7 Indirect fluorescent lighting supplemented by incandescent task lighting.
- .8 Flooring carpet.
- .9 Telephone.

5.8	Off	ice for the Director of State-Wide Services	200				
	Fun	Function: Office for the Director of State-Wide Services.					
	Requirements:						
	.1	Adjacent to the Assistant for State-Wide Services.					
	. 2	Accessible to the General Secretarial Work Area.					
	.3	Desk with typing extension and chair.					
	.4	.4 Lounge seating for two.					
	.5	Shelving.					
	.6	6 Credenza 30 ft. high by 30 in. deep by 10 ft. long.					
	.7	Two 4-drawer file cabinets.					
	.8	Natural light.					
	.9	Indirect fluorescent lighting with incandescent task lighting.					
	.10	Flooring - carpet.					
	.11	Telephone.					
5.9	Off	ice for the Assistant of State-Wide Services	100				
	Function: Office for the Assistant of State-Wide Services.						
	Req	quirements:					
	.1	Adjacent to Director of State-Wide Services.					
	.2	Desk with typing extension and chair.					
	.3	Two 4-drawer file cabinets.					
	. 4	Shelving.					
	.5	Natural light.					

.6 Indirect fluorescent lighting with incandescent task

lighting.

5.9	Office	for	the	Assistant	of	State-Wide	Services	(continued)

- .7 Flooring carpet.
- .8 Telephone.

5.10 Work Area for State Salvage Act Coordinator

75

Function: Work station for use by State Salvage Act Coordinator.

Requirements:

- .1 Accessible to the General Secretarial Work Area.
- .2 Desk and two chairs.
- .3 Shelving.
- .4 Indirect fluorescent lighting with incandescent task lighting.
- .5 Flooring carpet.
- .6 Telephone.

5.11 Office for Public Information Director

150

Function: Office for Public Information Director.

- .1 Accessible to the General Secretarial Work Area.
- .2 Desk with typing extension and chair.
- .3 One credenza 30 in. high by 30 in. deep by 10 ft. long.
- .4 Four 4-drawer file cabinets.
- .5 Book shelves along one wall.
- .6 Natural light.
- .7 Indirect fluorescent lighting supplemented by incandescent task lighting.

5.11 Office for Public Information Director (continued)

- .8 Flooring carpet.
- .9 Telephone.

5.12 Conference/Board Room

800

Function: Area for the Museum Commission to meet and for staff meetings.

Requirements:

- .1 This area should be accessible from the Reception Area.
- .2 Conference table to seat twenty.
- .3 Area around sides of room for visitors.
- .4 A recessed unit for 35 mm. slide projection at one end of the room with a roll-down large screen at the other end.
- .5 Incandescent lighting.
- .6 Flooring carpet.
- .7 Telephone.

5.13 Staff Lounge

350

Function: Informal lounge/eating area for the Museum staff.

- .1 Table and chairs to seat fifteen.
- .2 Lounge seating for six.
- .3 Pullman type kitchen area with small stove, refrigerator, sink, storage cabinets, and work area.
- .4 Convenience outlets at counter top level and floor level.
- .5 Natural light.

5.13 Staff Lounge (continued)

- .6 Indirect fluorescent lighting.
- .7 Flooring carpet.
- .8 Telephone.

5.14 Staff Toilets

150

Function: Toilet facilities for the administrative staff.

Requirements:

- .1 Two rooms, each with two water closets and two lavatories, accessible to the administrative offices.
- .2 Indirect fluorescent lighting.
- .3 Flooring hard surface (quarry tile, ceramic tile, terazzo, seamless flooring).

5.15 Copier Room and Office Supply Storage

100

Function: Work area for the copy machine and storage area for office supplies.

Requirements:

- .l This area should be accessible from the General Secretarial Work Area.
- .2 One copy machine.
- .3 A storage cabinet for the storage of copy supplies.
- .4 One-ft.-deep shelving on two sides of the room.
- .5 Supply cabinet.
- .6 Fluorescent lighting.
- .7 Flooring carpet.

SUBTOTAL NET AREA:

3,425

6. Exhibition Support Facilities

Net Sq.Ft.

6.1 Director of Exhibits' Office

200

Function: Office for the Director of Exhibits.

Requirements:

- .1 Adjacent to the Exhibit Design Area.
- .2 Conveniently accessible to the Graphic Production Area, Silkscreen Work Area and Darkrooms, the Exhibit Workshop and Storage Area, and the Audiovisual Production and Work Room.
- .3 Desk and chair.
- .4 Lounge seating for two.
- .5 Homosote tack surface on one wall.
- .6 Shelving.
- .7 Credenza 30 in. high by 30 in. deep by 10 ft. long.
- .8 Two 4-drawer file cabinets.
- .9 Natural light.
- .10 Indirect fluorescent lighting with incandescent task lighting.
- .11 Flooring carpet.
- .12 Telephone.

6.2 Exhibit Staging Area

1,200

Function: Area where objects for exhibition are assembled for preliminary planning, final selection, and design. The planning and design is executed by exhibition staff and the Curators, working as a team. This area would be used for exhibits when they are actually being assembled, not for long range planning or design.

Requirements:

.1 This area should be accessible to other Exhibition Support Areas and to both the Collection Storage Areas and the Exhibition Areas.

6.2 Exhibit Staging Area (continued)

- .2 Clear access 7 ft. wide by 10 ft. high should be provided to this area.
- .3 This area should be able to be secured from public areas.
- .4 One drafting table, 3 ft. wide by 6-1/2 ft. long, and chair.
- .5 Two storage cabinets for model supplies, 3 ft. wide by 2 ft. deep.
- .6 Table 4 ft. by 8 ft. for exhibit model work.
- .7 Four work tables 4 ft. by 8 ft., movable and collapsible, for the laying out of artifacts.
- .8 Two wire hanging racks 8 ft. by 8 ft.
- .9 Sink.
- .10 Two walls should have tack surfaces (3/4 in. plywood over strapping).
- .11 Lockable cabinet for artifact storage.
- .12 Indirect fluorescent lighting supplemented by incandescent track lighting.
- .13 Flooring sealed concrete.
- .14 Telephone.

6.3 Exhibit Design Area

350

Function: Area for the planning and design of longterm and temporary exhibits.

- .1 This area should be accessible to the Exhibit Staging Area.
- .2 Two drafting tables, 3 ft. wide by 6-1/2 ft. long, and chairs.
- .3 Table 4 ft. by 8 ft. for exhibit model work.

6.3 Exhibit Design Area (continued)

- .4 Storage cabinet for model supplies, 3 ft. wide by 2 ft. deep.
- .5 Homosote tack surfaces on all walls.
- .6 Shelving.
- .7 Indirect fluorescent lighting supplemented by incandescent track lighting.
- .8 Natural light.
- .9 Flooring carpet.
- .10 Telephone.

6.4 Graphic Production Area

Function: Area for the production of graphics for the Museum's exhibits, publications, and signage.

Requirements:

- .1 This area should be accessible to the Exhibit Design Area and the Silkscreen Work Area and Darkrooms.
- .2 Counter 30 in. wide by 30 in. high on three sides of room.
- .3 Two drafting tables, 4 ft. by 8 ft., and chairs.
- .4 One work table.
- .5 Mat cutting area.
- .6 Drymount press area.
- .7 Two storage cabinets for supplies, 3 ft. wide by 2 ft. deep.
- .8 Shelving.
- .9 Homosote tack surfaces on walls.
- .10 Light table.
- .11 Natural light.

3**5**0

- 6.4 Graphic Production Area (continued)
 - .12 Indirect fluorescent lighting supplemented by incandescent track lighting.
 - .13 Flooring carpet.
 - .14 Telephone.

6.5 Silkscreen Work Area and Darkrooms

700

Function: Areas for cutting of stencils, doing pasteups, producing and executing silkscreen work. Darkrooms for film processing, printing and silkscreen work.

- .1 Adequate ventilation throughout these areas.
- .2 Work Area: (250 sq.ft.)
 - .1 This area should be accessible to the Graphic Production Area.
 - .2 Work counters 30 in. high by 30 in. wide on two sides of the room.
 - .3 Two work tables, 4 ft. by 8 ft.
 - .4 Two storage cabinets for supplies, 3 ft. wide by 2 ft. deep.
 - .5 Hanging storage rack for silkscreen frames.
 - .6 Vacuum pump/table for silkscreening.
 - .7 Arc printer, 36 in. by 48 in.
 - .8 Indirect fluorescent lighting supplemented by incandescent track lighting.
 - .9 Flooring sealed concrete.
 - .10 Telephone.

6.5 Silkscreen Work Area and Darkrooms (continued)

- .3 Photographic Darkroom: (120 sq.ft.)
 - .1 This area should be directly off of the Work Area.
 - .2 Light lock to achieve absolute darkness.
 - .3 Film drying cabinet.
 - .4 Sink, 6 ft. long by 3 ft. wide, with temperature controlled water supply.
 - .5 Enlarger bench for two enlargers.
 - .6 Two enlargers.
 - .7 Print washer.
 - .8 Print drier.
 - .9 Cabinets for the storage of photographic paper and darkroom equipment.
 - .10 Small refrigerator for film storage.
 - .11 Flooring sealed concrete.

.4 Film Loading and Processing Darkroom: (30 sq.ft.)

- .1 This area should be off of the Photographic Darkroom.
- .2 Light lock to achieve total darkness.
- .3 Shelf or small work surface for film loading.
- .4 Sink with temperature controlled water supply for film processing.
- .5 Shelf over sink to hold film processing equipment.
- .6 Flooring sealed concrete.

6.5 Silkscreen Work Area and Darkrooms (continued)

- .5 Silkscreen Darkroom: (300 sq.ft.)
 - .l This area should be off of the Work Area
 - .2 Light lock to achieve total darkness.
 - .3 Three sinks, 4 ft. by 5 ft. each.
 - .4 Work area for a copy camera, 30 in. by 72 in.
 - .5 Wash-out area, 8 ft. by 8 ft., with rack and special ventilation.
 - .6 Flooring sealed concrete.

6.6 Exhibit Workshop and Storage

1,500

Function: Area for the fabrication of exhibit structures, and for receiving and storing building materials (lumber, plywood, acrylic sheeting, glass, tools, etc.)

- .1 This area should be accessible to the General Receiving Area, the Exhibition Areas, and the Exhibit Design Area.
- .2 This area should be adjacent to Shop Storage.
- .3 This area should have a minimum length of 35 ft. to allow for the ripping of long pieces of lumber.
- .4 Minimum ceiling height of 12 ft.
- .5 Two work tables 4 ft. by 8 ft.
- .6 Work counter 30 in. high by 36 in. wide along one wall.
- .7 Four storage cabinets 3 ft. wide by 2 ft. deep for the storage of hand tools and carpentry supplies.
- .8 Utility sink.
- .9 Dust collection system.
- .10 Power equipment, including two table saws, band saw and drill press.

6.6 Exhibit Workshop and Storage (continued)

- .11 110/220 volt electric service.
- .12 Storage for lumber and sheet materials, lumber up to 16 ft. lengths, and sheets up to 8 ft. by 8 ft.
- .13 Fluorescent lighting.
- .14 Flooring sealed concrete.

6.7 Painting Area and Spray Booth

350

Function: Area for the painting of exhibit structures and components.

- .1 This area should be accessible to the Exhibit Work-shop and Storage Area.
- .2 Two work tables 4 ft. by 8 ft.
- .3 Two storage cabinets, 3 ft. wide by 2 ft. deep.
- .4 One-foot wide shelving for the storage of paint.
- .5 Spray booth large enough to handle 4 ft. by 8 ft. sheets with heavy duty exhaust system.
- .6 Compressed air supply with compressor located in Mechanical Room.
- .7 Utility sink.
- .8 Incandescent lighting.
- .9 Flooring sealed concrete.

6.8 Audio-Visual Work Room

Function: To accommodate in-house multi-media productions and for the repair and servicing of audiovisual equipment used in Museum programs.

Requirements:

- .1 Accessible to Exhibition Support Facilities.
- .2 Work bench along one wall for audio-visual editing, and taping.
- .3 Four storage cabinets, 3 ft. wide by 2 ft. deep.
- .4 Work bench along one wall for the repair and maintenance of equipment.
- .5 Ten lin.ft. of adjustable metal shelving.
- .6 Incandescent lighting supplemented by incandescent task lighting.
- .7 Flooring carpet.
- .8 Telephone.

6.9 Exhibition Prop Storage

1,000

400

Function: Area for the storage of temporary exhibit components.

- .1 This area should be accessible to the Exhibit Work-shop and Storage Area and the Exhibition Areas.
- .2 Racks for the storage of panels.
- .3 Floor area for the storage of exhibit cases, bases, platforms, etc.
- .4 Adjustable shelves for small props.
- .5 Fluorescent lighting.
- .6 Flooring sealed concrete.

6.10 Storage Area for Traveling Exhibits and Suitcase Exhibits 2,000

Function: Storage area for traveling exhibits and suitcase exhibits which are not on loan to other institutions.

Requirements:

- .1 Accessible from the General Receiving Area and the Crate Storage and Packing Area.
- .2 One hundred lin.ft. of 2 ft. deep by 4 levels of adjustable metal shelving for the storage of 200 suitcase exhibits.
- .3 Shelving and floor area for the storage of traveling exhibits.
- .4 Flooring sealed concrete.
- .5 Indirect fluorescent lighting.

SUBTOTAL NET AREA:

8,050

Net 7. Building Service Facilities Sq.Ft. 7.1 Custodial Storage 300 Function: Area for the storage of custodial supplies. Requirements: .1 Twenty-five lin.ft. of storage shelving, 2 ft. wide by five shelves high. .2 Four storage cabinets, 3 ft. wide by 2 ft. deep. .3 Utility sink. .4 Eight lockers. .5 Fluorescent lighting. .6 Flooring - sealed concrete. Office for the Chief of Security, Assistant Chief of 7.2 Security, and Guard Room 200 Function: Office for the Security Officer, the building environmental, security, and fire detection monitoring equipment, and the locker area for Security Guards. Requirements: .1 Adjacent to the General Receiving Area. .2 Desk with typing extension. .3 Three 4-drawer file cabinets. .4 Area for monitoring equipment. .5 Ten lockers for security staff. .6 Indirect fluorescent lighting.

.7 Flooring - carpet.

.8 Telephone.

7.3 Outdoor Maintenance Storage

500

Function: Area for the storage of outdoor maintenance equipment and supplies, including Museum vehicles, lawn mower, etc.

Requirements:

- .1 This area should be accessible from the service area.
- .2 Area for outdoor maintenance equipment including lawn mower, gardening supplies, etc.
- .3 Roll-up door, 12 ft. wide by 10 ft. high.
- .4 Pass door, 3 ft. wide by 7 ft. high.
- .5 Twenty lin.ft. of shelving, 2 ft. wide by five shelves high.
- .6 Fluorescent lighting.
- .7 Flooring sealed concrete.

7.4 Mechanical and Electrical Rooms

6,000

Function: Area for the building mechanical equipment, main electrical switchgear, electric rooms, elevator machine rooms, air conditioning equipment, hot water heater, and air handling units.

- .1 Area for boilers, air conditioning equipment, air handling equipment, and main electrical switchgear.
- .2 Access to fresh air supply for air conditioning equipment and air handling equipment.
- .3 Emergency generator to handle emergency lighting and selected critical power needs.
- .4 Hot water heater.
- .5 Air compressor to service exhibition preparation areas and Exhibition Areas.
- .6 Fluorescent lighting.
- .7 Minimum ceiling height 12 ft.

- 7.4 Mechanical and Electrical Rooms (continued)
 - .8 Flooring sealed concrete.
 - .9 Floor drains.

7.5 Building Supervisor's Office

150

Function: Office for the Building Supervisor.

Requirements:

- .1 This area should be accessible to the Custodial Storage Area.
- .2 Desk.
- .3 Three 4-drawer file cabinets.
- .4 Shelving.
- .5 Indirect fluorescent lighting.
- .6 Flooring carpet.
- .7 Telephone.

7.6 General Receiving Area

450

Function: Receiving area for general deliveries to Museum, including mail, Museum Shop, Exhibit Workshop, custodial supplies, etc. For security reasons the General Receiving Area should be separate from the Collection Receiving Area.

- .1 Access to this area should be by means of a loading dock 3 ft. above the service yard for loading and unloading from large vehicles and by a level connection for loading and unloading from smaller vehicles.
- .2 Accessible to the Collection Receiving Area.
- .3 Two roll-up doors 12 ft. by 12 ft. located at the outer edge of the loading dock.
- .4 A 3-1/2 ft. pass-door separate from the roll-up door.

FACILITY PROGRAM (continued)

7.6 General Receiving Area (continued)

- .5 Twenty lin.ft. of shelving, 2 ft. wide by five shelves high.
- .6 Fluorescent lighting.
- .7 Flooring sealed concrete.
- .8 Telephone.
- .9 Storage area for fork lift truck.

SUBTOTAL NET AREA:

7,600

FACILITY PROGRAM (continued)

8. Aerial Tramway Terrace (Upper Station)

Net Sq.Ft.

8.1 Aerial Tramway Terrace

Function: This is the area for loading and unloading the aerial tramway cabins at the upper station or Museum end of the aerial tramway line.

Requirements:

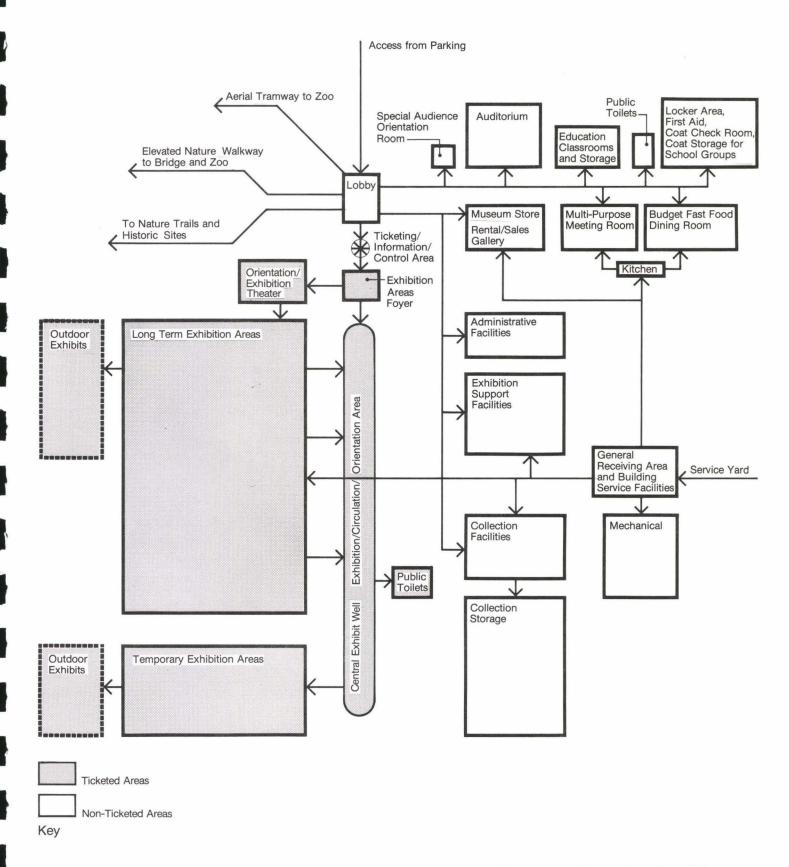
- .1 This area should be directly accessible from the Lobby.
- .2 This area should be covered but not enclosed.
- .3 Two docking positions should be provided for the tramway cabins.
- .4 Area should be provided for loading and unloading tramway cabins.
- .5 A minimum of 35 ft. clearance should be provided from the Terrace to the underside of the roof structure to allow for the track ropes, the haul rope, and the rescue rope.
- .6 The Terrace should be a minimum of 16 ft. above the ground.
- .7 Provisions should be made for the haul rope counterweight and track rope anchorage below the Terrace level.

SUBTOTAL NET AREA:

FACILITY PROGRAM (continued)

9.	Parki	ing	Sq.Ft.
	9.1	Parking for 500 Cars	
		Function: Parking for Museum staff and visitors.	
		Requirements:	
		.1 Total on-site parking for 500 cars.	
		.2 Parking for 30 buses.	
TOTA	L NET	AREA:	146,315
TOTA	L GROS	SS AREA (NET AREA TIMES APPROXIMATELY 1.3):	190,000

Net



Budgets

Introduction

This section of the report contains the estimated <u>Capital Budget</u>, which outlines all of the capital costs for the new State Museum, and the estimated <u>Operating Budget</u> for fiscal year 1984/85, the first year the facility will be open to the public.

The <u>Capital Budget</u> is presented in three sections. The first section, which includes Building Construction, Site Development, Architectural and Engineering Fees, Miscellaneous Expenses (special consultants, soils testing and borings, site surveys, etc.), and Furnishings and Equipment, is estimated to be \$17,650,000. The second section includes all exhibit-related research planning, design, fabrication, installation work, artifact acquisition, restoration, and pictorial rights for the initial phase of long term exhibits, as well as the planning fees for future exhibit phases. This part of the budget is estimated to be \$4,300,000. The third section, which is the cost of the aerial tramway, includes a lower terminal, a tower, two fifteen-passenger cabins, a station built into the Museum building, engineering, and installation costs. This part of the budget is estimated to be \$2,000,000. The total Capital Budget is \$23,950,000.

The Operating Budget for fiscal year 1984/85 is estimated to be \$1,783,500. This budget is based upon 57 full-time employees, including 3 people to operate the aerial tramway, seven-day operation of the Museum, and the employment of a contract maintenance service to clean and maintain the building and grounds and service the building's mechanical and electrical systems. Other categories in the Operating Budget are Utilities, Administrative Costs, Professional Travel, Temporary Exhibitions Related Expenses, Curatorial Care of the Collections, Library, Conservation Laboratory, Publications, Memberships in Professional Museum Organizations, Education Programs, and the Aerial Tramway.

It is important to note that earned revenue from Museum Admissions, Parking, and the Aerial Tramway, and from the Friends of the Museum by means of Memberships and the Museum Store, are projected to be \$914,450 for fiscal year 1984/85. If this earned revenue is credited against the estimated Operating Budget of \$1,783,500, a net Operating Budget of \$869,050 would result.

Capital Budget

The following cost estimates are based on construction beginning fall of 1981. For this reason a 20% increase has been allowed for cost escalation between December 1979 and the fall of 1981.

1.1	Building Construction, including fixed furnishings such as auditorium seating, information booth in lobby, flooring materials in all support areas, but excluding flooring and wall finishes in exhibition areas. Current cost of \$65/sq.ft. plus 20% escalation = \$78/sq.ft. x 190,000 sq.ft.	\$14,820,000
1.2	Site Development (roads, parking, landscaping, elevated walkway up hill, utilities, etc., but excluding site exhibit work).	650,000
	Subtotal	\$15 ,4 70,0 0 0
1.3	Basic Architectural and Engineering Fees.	925,000
1.4	Miscellaneous Expenses, including special consultants, soils testing and borings, site surveys, etc.	70,000
	Subtotal	\$16,465,000
1.5	Furnishings and Equipment, including collection storage systems, conservation laboratory equipment, partial office furnishings, workshop equipment, wall systems in temporary exhibit areas, etc., and including design fees, but excluding furnishings and equipment in the long term exhibition areas.	350,000
	Subtotal	\$16,815,000
1.5	Contingency at ± 5%.	835,000
	SUBTOTAL (FACILITY COST):	\$17,650,000

Capital Budget (continued)

The following exhibition fabrication costs are based on construction beginning in early 1982. For this reason a 20% increase has been allowed for cost escalation between December 1979 and 1982.

2.1	Exhibit Construction and Installation for initial phase of long term exhibits. This phase is estimated to be approximately one-half of total long term exhibit construction. Current cost of \$80/sq.ft. plus 20% escalation = \$96/sq.ft. x 30,000 sq.ft.	\$ 2,880,000
2.2	Exhibition Design and Supervision of Installation for initial phase of long term exhibits.	576,000
2.3	Planning for Future Exhibit Phases.	50,000
2.4	Exhibit Research for initial phase of long term exhibits.	150,000
2.5	Artifact Acquisition, Restoration, and Pictorial Rights for initial phase of long term exhibits.	450,000
	Subtotal	\$ 4,106,000
2.6	Contingency at ± 5%.	194,000
	SUBTOTAL (INITIAL EXHIBITION COST):	\$ 4,300,000
3.1	Aerial Tramway, including a lower terminal near the entrance to the Riverbanks Zoo, a tower on the Zoo side of the River, two cabins (15 passenger capacity), an upper station built into the Museum building, engineering, and installation.	\$ 2,000,000
	SUBTOTAL (AERIAL TRAMWAY COST):	\$ 2,000,000
TOTAL	PROJECT COST:	\$23,950,000

Operating Budget		FY 1984/85
1.	Salaries	\$1,145,700
	Including fringe benefits, part-time and temporary help for seven-day operation, 54 full-time staff members.	
2.	<u>Utilities</u>	155,000
	Including electricity, gas, and water.	
3.	Maintenance Service Costs	65,000
	Maintenance service for mechanical and electrical systems, including temperature control system, fire alarm system, water treatment, filter changing, normal maintenance on all air handling equipment, boiler maintenance, and maintenance of electrical systems. Estimate from private contractors providing this service and based on system proposed for this building. Also included are maintenance service for the escalators in the Exhibition Area, passenger elevators and freight elevator.	
4.	Janitorial/Cleaning Services	57,000
	Including contract cleaning service, cleaning supplies, and trash collection.	
5.	Administrative Costs	72,000
	Including telephone, postage, equipment and supplies, reprodution, and insurance.	C-
6.	Professional Travel	45,000
	Including two automobiles and two vans, as well as local business-related travel by Museum personnel using their own vehicles.	
7.	Temporary Exhibitions Related Expenses	70,000
	Including invitations, postage, preparation and staging supplies, live demonstrators, etc.	
8.	Curatorial Care of Collections	5,000
	Including fumigants, film and processing, photographic equipment maintenance, accessioning forms, etc.	

Operating Budget (continued)

9. <u>Library</u> 2,500

Including acquisitions, periodicals, binding, supplies.

10. Conservation Laboratory 8,000

Including small tools, supplies, chemicals.

11. Publications 30,000

Including six newsletters, two Museum bulletins, printed exhibition guides, volunteer newsletters, annual report, publicity brochure, and miscellaneous.

12. Memberships in Professional Museum Organizations 1,000

Including institutional memberships in such organizations as the American Association of Museums, the American Association for State and Local History, etc.

13. Education Programs --

It is assumed that tuition for Education Programs requiring special supplies will cover the cost of these supplies.

\$1,656,200

14. Aerial Tramway 127,300

Including salaries, fringe benefits, part-time and temporary help for seven-day operation, parts and maintenance, electricity, and insurance.

TOTAL OPERATING BUDGET: \$1,783,500

Revenue Sources

Introduction

This section of the report discusses funding sources for both the capital and operating costs of the State Museum. In addition to funding from the State, other potential sources of both capital and operating revenue will be pursued.

The major sources of capital funding are the state of South Carolina, Grants from Private Foundations, Gifts from Private Corporations, particularly those with substantial offices or plants in the State, and Gifts from Individuals. In addition, federal funding to cover the cost of installing the rooftop solar panels and related mechanical equipment should be investigated.

Potential sources of operating revenue fall into five distinct categories: Funding from the State of South Carolina; Revenue Earned from Museum Activities; Revenue Earned by the "Friends of the Museum" (a privately incorporated volunteer group, presently in its formative stages, which will be associated with the State Museum); Funding from Various Federal Sources and National Organizations for specific programs and activities; and Funding from Private Foundations, Corporations, and Individuals. Museum earned revenues will include general admission fees, parking fees, and proceeds from the sale of aerial tramway tickets. Revenue earned by the "Friends of the Museum" through the operation of the Museum Store and through memberships will be retained by the "Friends" and used to support programs of the State Museum. The Budget Fast Food Dining also is a potential revenue-producing activity; however, negotiations are presently underway with the State Commission for the Blind to provide this service.

Potential federal funding sources for operating revenue and special programs include the Institute for Museum Services, the National Endowment for the Humanities, the National Endowment for the Arts, the Department of Education, the Department of Labor, the Smithsonian Institution, the National Trust for Historic Preservation, and the General Services Administration. An excellent reference manual for all of these and many other potential funding sources is the recently published book, "Funding Sources and Technical Assistance for Museums and Historical Agencies - a Guide to Public Programs", compiled by Hedy A. Hartman of the South Carolina Museum Commission staff and published by the American Association of State and Local History.

A combined total of \$914,450 is projected as earned revenue by the Museum and by the "Friends of the Museum" for fiscal year 1984/85, the first year of operation. An explanation of how these revenues will be earned is included in this section of the report, as well as brief descriptions of the various other sources for funding which can be approached to assist with some of the Museum's operating costs and special programs.

Whether or not the Museum is allowed to retain earned revenues generated from the various activities described above, it is important to view the Museum's total operating budget in the light of this earned revenue potential. The total of \$914,450 projected as earned revenue should be credited against the total projected Operating Budget of \$1,783,500, leaving a net operating cost of \$869,050. Because of the availability of so many types of funding for various Museum programs and activities, all of which the new State Museum will be able to take advantage of as a result of its multi-disciplinary nature, this net operating budget can be reduced considerably through well-prepared grant applications to these various institutions and foundations. For this reason it is essential that all key staff members of the State Museum become completely familiar with the many potential sources of operating and program grants and develop a high level of competency in grant-seeking.

CAPITAL FUNDING SOURCES

The following sources for capital funding are discussed in the following pages:

- State of South Carolina.
- 2. Grants from Private Foundations, Gifts from Private Corporations, and Gifts from Individuals.
- 3. Federal Grants for Solar Energy Application.

State of South Carolina

This is the primary source of capital funding for the State Museum. In 1980 \$23,950,000 will be requested from the State Legislature for the completion of this project. This funding is sufficient to build the entire project and one-half of the total exhibits planned for the facility. In addition to the State of South Carolina, other funding sources will be approached for the second phase of exhibits to be installed in the building and on the site.

Grants from Private Foundations, Gifts from Private Corporations, and Gifts from Individuals

The <u>Capital Budget</u> outlined in <u>Section 5 - Budgets</u> includes only one-half of the exhibits that are planned for the Museum. Concurrent with the design and construction of the first half of the exhibits, private foundations, major corporations, and individuals will be approached to assist with the Museum's Exhibition Program. Special plaques should be displayed prominently in the Museum honoring individuals, companies, or foundations who have contributed a substantial amount toward the project.

An effort should be made to approach corporations with major plants or other business facilities within the region being served by the Museum, because their employees and families will receive the benefits of close proximity to the new Museum. National corporations with a particular interest in the history and natural history of the South, and particularly the state of South Carolina, or the art produced in this region of the country should be approached as well. These corporations might be interested in promoting a special project for their own public relations or philanthropic programs. Their help in funding special exhibits can be used in their national advertising campaigns.

In conjunction with this fund raising effort, an extensive public relations campaign should be initiated to acquaint the citizens of South Carolina with the Museum and its programs. This campaign should include the preparation of a slide/tape presentation illustrating what the expanded facility will be like and the kind of activities that will take place there. The slide show

could be shown to various citizen, service, and church groups, the Chambers of Commerce and members of the business communities in different parts of the state, and on state-wide television shows. Special presentations could be made to Parent-Teacher Associations so that the parents of school children will be made aware of how the Museum will be serving the school children of the state. All media should be pursued in an active campaign to publicize the Museum, and a general brochure or pamphlet should be prepared to capture the interest of potential visitors and donors. This brochure should be widely distributed throughout the state, and traditional endorsements by public officials, including State Legislators and the Governor, should be sought to help the Museum with private fund raising activities and create an interested audience for this new facility.

Federal Grants for Solar Energy Application

The possibility of acquiring a federal grant from the Department of Energy for installation of the solar panels on the roof of the Museum building should be pursued. Funds available from the Department of Energy may pay for the cost of both the installation and the solar equipment, as well as any other expenses that are over and above what typical mechanical/electrical installations would cost. Buildings used by the public, such as schools or museums, receive a high priority when seeking grants from the Department of Energy because the public has an opportunity to learn more about solar energy when it is used in buildings of this type. The incorporation of a program or exhibit specifically designed to educate the public about solar energy in conjunction with a building utilizing solar energy also creates a distinct advantage.

OPERATING REVENUE SOURCES

The following sources for operating revenue are discussed in the following pages:

- 1. Funding from the State of South Carolina.
- 2. Revenue to be Earned from Museum Activities.
- 3. Revenue to be Earned by the "Friends of the Museum".
- 4. Funding from Various Federal Sources and National Organizations.
- 5. Funding from Private Foundations, Corporations, and Individuals.

Funding from the State of South Carolina

The total Operating Budget for fiscal year 1984/85, the first year of Museum operation, is \$1,783,500. In addition to the \$914,450 that is projected as earned revenue by the Museum and by the "Friends of the Museum", key Museum staff will identify sources and seek out funding from other sources for special programs and exhibitions.

Revenue to be Earned from Museum Activities

General Admission Fees

\$660,500

It is our recommendation that the State Museum charge admission fees as indicated on the tables included in this section. These admission charges are based on the Riverbanks Zoo's present admission policy, escalated to projected rates in fiscal year 1984/85. Some of the special rates have been adjusted to what we feel is a very reasonable charge.

The Director of the Zoo projects that their annual visitation will increase to 400,000 by 1984 based on the following assumptions: (1) they are able to construct two new major exhibits, a new ape house, and a new reptile house planned to be completed by 1982; (2) the State Museum is open to the public in 1984; and (3) a connection between the two institutions is established by an aerial tramway. The figures below indicate 41,000 will result from an increase in the population of the Richland/Lexington Counties population area.

U.S. Standard Metropolitan Statistical Areas Population Projections (Richland/Lexington Counties)

SMSA	1978	390,000	Zoo visitation = 300,000, or 77% of SMSA	١.
SMSA	1980	406,000		
SMSA	1984	443,300*	Zoo visitation = 341,341, or 77% of SMSA	١.
SMSA	1985	453,700		
SMSA	1990	503,000	*Extrapolated from 1980 and 1985 figures	
			available.	

We are projecting an annual visitation of 350,000 to the State Museum, 315,000 of which would be paid visitors. The other 10% represents members and others who get in free. This projection is based on Zoo visitation experience and projections; on the fact that a special price will be offered to visitors who intend to go to both institutions; on the imaginative and ambitious exhibits envisioned for the State Museum; and on the attraction of the aerial tramway connection between the two institutions. The visitor-type ratios also are based on the Zoo's experience. An assumption is made that as many as 30% of the visitors will take advantage of the reduced admission fee that will be offered to visitors buying a combination ticket for both the Museum and Zoo.

The Projected Fiscal Year 1984/85 Income from Admissions tables show how \$660,500 was arrived at. The first table on the page shows projected revenue if no reduced rate is offered for the purchase of a combination ticket. This chart also shows the percentages used to split Museum visitors into type groups. The table indicates that an additional \$61,660 could be earned if no combination tickets were offered. However, it is probable that visitation would not be as high if this is not done. The other two tables are based on 30% of the visitors buying combination tickets at a reduced rate and the remaining 70% buying regular admission tickets.

Projected Fiscal Year 1984/85 Income from Admissions

Regular Admission Income Projection

Type of Visitor	Percentage of Total	Regular Admission	Revenue Calculation	Total Revenue
Adults	47%	\$3.50	148,050 x \$3.50	\$518,175
Children	18%	\$1.00	56,700 x \$1.00	56,700
Military	2%	\$2.00	6,300 x \$2.00	12,600
Senior Citizens	3%	\$1.50	9,450 x \$1.50	14,175
Students	6%	\$1.50	18,900 x \$1.50	28,350
Adults in Groups	9%	\$2.00	28,350 x \$2.00	56,700
Students in Groups	15%	\$.75	$47,250 \times $.75$	35,438
	100%		315,000	722,138

Combined Regular and Reduced Rate Admission Income Projection

Type of Visitor	Recommended Reduced Admission for Combination Ticket	Revenue Calcula	tion	Total Revenue
Adults Children Military Senior Citizens Students Adults in Groups Students in Groups	\$2.50 \$.75 \$1.50 \$1.00 \$1.00 \$1.50 \$.50	148,050 x 30% = 56,700 x 30% = 6,300 x 30% = 9,450 x 30% = 18,900 x 30% = 28,350 x 30% = 47,250 x 30% =	17,010 x \$.75 1,890 x \$1.50 2,835 x \$1.00 5,670 x \$1.00	\$111,038 12,758 2,835 2,835 5,670 12,758 7,088
Subtotal:			94,500	154,982
Type of Visitor	Regular Admission	Revenue Calculat	tion	Total Revenue
Type of Visitor Adults Children Military Senior Citizens Students Adults in Groups Students in Groups		148,050 x 70% = 56,700 x 70% = 6,300 x 70% =	103,635 x \$3.50 39,690 x \$1.00 4,410 x \$2.00 6,615 x \$1.50	
Adults Children Military Senior Citizens Students Adults in Groups	\$3.50 \$1.00 \$2.00 \$1.50 \$1.50 \$2.00	148,050 x 70% = 56,700 x 70% = 6,300 x 70% = 9,450 x 70% = 18,900 x 70% = 28,350 x 70% =	103,635 x \$3.50 39,690 x \$1.00 4,410 x \$2.00 6,615 x \$1.50 13,230 x \$1.50 19,845 x \$2.00	\$362,722 39,690 8,820 9,922 19,845 39,690

Parking \$ 52,000

Projected parking for the State Museum is based on the ratio of visitors to cars that has been experienced at the Riverbanks Zoo. The 50¢ parking fee presently charged by the Zoo is escalated to 75¢ for fiscal year 1984/85.

1984 projected visitation = 350,000

26.6% of the total visitors will drive cars to the Museum (93,100 cars)

93,100 cars times 75¢ per car =

69,825

Assume 25% of these 93,100 cars carrying Museum visitors (23,275 cars) will park in the Zoo parking area.

-17,456

Total projected revenue for State Museum parking

\$ 52,369

Aerial Tramway

\$ 81,950

Projected revenue from the aerial tramway operation is based on the following assumptions and calculations: First, it is assumed that both members and non-members will pay to ride the tramway. Second, it is assumed that a one-way ticket on the tramway will cost 50¢ and a round-trip ticket will cost 75¢.

As indicated on the chart titled <u>Combined Regular and Reduced Rate Admission Income Projection</u> in this section, 30% of the State Museum visitors will have purchased combination tickets either from the Museum or from the Zoo. The total Museum projected visitation of 350,000 times 30% equals 105,000 people with combination tickets, or visitors who are included in both the Museum and the Zoo visitation figures. Therefore, these 105,000 visitors should be divided in half or they will be counted twice as visitors to the site. 105,000 divided by 2 equals 52,500.

Total projected visitation to both institutions:

750,000

Less half the combination ticket purchasers:

- 52,500

Total visitors to the Museum/Zoo site:

697,500

Assume that 30% of the total visitors purchase one-way tickets at 50¢ each: $697,500 \times 30\% = 209,250 \times 50\% =$	\$104,625
Assume that 20% of the total visitors purchase two-way tickets at 75¢ each: $697,500 \times 20\% = 139,500 \times 75¢ =$	104,635
Total gross revenue from aerial tramway.	\$209,250
Less aerial tramway operating expenses (see Operating Budget in Section 5 - Budgets).	-127,300
Net revenue from aerial tramway.	\$ 81,950

Revenue to be Earned by the "Friends of the Museum"

Museum Store \$76,000

This projected revenue is based on the net income of the Riverbanks Zoo Gift Shop for fiscal year 1978/79. Their net profit for that period of time was \$47,000, which amounts to an average of about 15¢ per visitor. Escalated 40% to adjust this figure to fiscal year 1984/85 would increase the average to 21.7¢ per visitor. The State Museum's projected visitation of 350,000 times 21.7¢ equals \$75,950.

Memberships \$44,000

The State Museum's programs, which will include classes, film series, lecture series, and other special events, will make the benefits of membership very appealing. In addition to free admission, members could be offered priority status with regard to classes offered at the Museum, reduced tuition fees, discounts in the Museum Store, free parking, priority status for tickets to special events and films, invitations to exhibit openings, etc.

The Riverbanks Zoo membership of 8,500 is the basis for the projection of income from Museum membership. The Museum should attract at least as many members as the Zoo because of the benefits that will be offered to members. The rates for Museum membership, which are escalated about 17% over what is presently being charged at the Zoo, would be as follows: family membership - \$25 per year, individual membership - \$18 per year. The escalation of membership fee rates is less than other escalated fees because traditionally museums increase membership fees more slowly than they increase other fees, such as general admission. The Zoo's 1979/80 membership revenue of \$37,000 escalated 17% to reflect higher rates at the State Museum for fiscal year 1984/85 brings the projected income from this source to \$43,875.

Summary of Estimated Revenue to be Earned from State Museum and "Friends of the Museum" Activities

Source of Earned Revenue	Fiscal Year 1984/85 Projected Revenue
General Admission Fees	\$660,500
Museum Parking Fees	52,000
Aerial Tramway Tickets Net Profit	81,950
Subtotal	\$794,450
Friends of the Museum - Museum Store Profits	\$ 76,000
Friends of the Museum - Memberships	44,000
Subtotal	\$120,000
TOTAL PROJECTED EARNED REVENUE:	\$914,450

Funding from Various Federal Sources and National Organizations for Specific Programs and Activities

Some of the funding programs offered by various federal and national private organizations are described briefly below:

Federal Grants

Institute of Museum Services

The Institute of Museum Services was created to assist museums in maintaining, improving, and increasing their services. Operational grants can be used to upgrade security, maintenance, conservation, and professional development. Some special projects which must be short term (about one year in duration) also are funded. Institutions that have been in existence and serving the public for a minimum of two years have priority. Most grants are offered on a 50-50 matching basis, but 20% of their funding does not require this match. The impact of the institution on the community and the unavailability of other similar type institutions in the area are important aspects of the decision to award grants. Grants are usually no greater than \$25,000.

National Endowment for the Humanities

The National Endowment for the Humanities offers funding in several categories which are applicable to the State Museum: history, archaeology, and cultural anthropology. Within these disciplines there are several NEH grant programs which the Museum can take advantage of to assist them with operating costs. In all cases, the programs require matching funds from another source.

Many kinds of grants are available from NEH. Highest priority is given to interpretive programs which, in addition to the identification and attribution of artifacts, tells what the artifact means in a historical or cultural context. This links experienced scholars to the broad public. Programs which are funded may include exhibitions, labeling of exhibits, brochures, walking tours, or slide/tape presentations. The NEH places high priority on historic site interpretations, permanent and temporary exhibitions, and exhibitions traveling to areas of the country not often served by such programs. They also fund programs which share underutilized collection resources or which involve the lending of collection objects to other institutions where they will be displayed.

NEH funds are also available for projects which create reference works and resources for scholarly research in the humanities and which make these resources available to scholars.

NEH's Office of Youth Programs administers a special grant program which offers support to museums and other cultural institutions and community organizations offering programs for children and youth, including the handicapped, school dropouts, and gifted children. The program is called, "NEH Youth Projects - A New Experimental Program". Of interest are programs which affect a large number of young people and offer a participatory learning experience. These programs would be outside of the school environment, primarily on weekends, during the summer, and after school hours. Money for planning these programs is available from NEH. the planning is completed, the money to support the programs should be sought from the local community, participant fees, other foundations, and the State Humanities Council, who get a sizeable amount of funds from NEH for this type of use within each state. The goal of the program is to strengthen the understanding of young people of the history, goals, and culture of man. The aim of the program is to encourage institutions to evaluate their resources and think of ways in which they can create links between their institution and the young people of the community. For new programs, grants of \$2,500 are available for planning funds.

Funds may be requested for both planning and implementation. For instance, applicants may request planning funds to enable them to bring in a series of consultants to evaluate existing programs, give ideas about where the institution may strengthen its interpretive programs and bring them to the public, or help them strengthen their staff. NEH support for staff is related solely to the project being funded, i.e., special consultants used for an interpretive exhibition, etc. No permanent staff members are funded by NEH.

Within the NEH Challenge Grant program, funds are available for maintenance, preservation, and conservation of collections; acquisition of equipment and materials; operating expenses (staff salaries, rent, utilities, mortgage, and general administration); and new or expanded programming and services. The minimum request for funds is \$30,000. Matching grants are given on a 1 to 3 matching basis, implying a 25% federal match.

National Endowment for the Arts

Outlined below are some of the grant programs offered by NEA which may benefit the State Museum's arts programming and exhibitions:

Outreach Programs

- 1. NEA's "Wider Availability of Museums" program offers matching grants of up to \$30,000 for the following kinds of programs which are applicable to the State Museum:
 - .1 Cooperative programs between the Museum and the surrounding school districts.
 - .2 Use of non-print media (television, video, film and radio) to broaden the experience of the arts in the Museum.

Exhibitions

- 1. NEA's "Special Exhibitions" program provides matching grants of up to \$20,000 for institutions participating in the use of a traveling exhibit. These grants support the following costs:
 - .1 Initial planning and organization of the exhibition.
 - .2 Services of an outside specialist.
 - .3 Catalogues.
 - .4 Shipping, insurance, and related events.
 - .5 Rental fee, unless the exhibition was funded by an NEA grant.
- 2. NEA's "Cooperative Programs" category provides matching grants of up to \$50,000 to assist with the cost of extended loans from one museum to another. The support includes cost of preparing projects for travel, shipping, and insurance, as well as related staff time and travel.
- 3. NEA's "Utilization of Museum Collections" program provides matching grants of up to \$75,000 for the re-installation of permanent collections in storage, the re-installation of permanent collections in a more effective manner, or the installation of any newly acquired collections.

Increase of the Museum's Permanent Collection

1. NEA's "Museum Purchase Plan" program offers matching grants of \$5,000, \$10,000, \$15,000, and \$20,000 for the purchase of two or more works of art by living American artists each year.

Assistance with Collection Care

1. NEA's "Catalog" program offers matching grants of up to \$75,000 for the documentation of the permanent collections.

Staff and Consultant Assistance

- 1. NEA"s "Museum Training" program provides matching grants of up to \$60,000 for the funding of an internship program to provide museum training to qualified people, apprenticeships for exhibit preparators, carpenters, etc., and the training of volunteers.
- 2. NEA's "Visiting Specialist" program offers matching grants of up to \$15,000 to support specialists who can assist with the improvement of a museum's administration, registration, cataloguing, exhibit installation techniques, storage techniques, using non-print media (television, video, film, and radio), education and public service

programs, development of plans for membership drives and other fund raising activities.

3. NEA's "Cooperative Programs" category provides matching grants of up to \$50,000 to support the sharing of staff among a group of institutions to upgrade the level of expertise available to the individual institutions and to support regional meetings of arts institutions to articulate the problems or needs of a group of art-related institutions within that region.

Challenge Grants

 NEA Challenge Grants are available to cover increased operating costs and to help create an endowment for the operation of the museum. Grants are given on a 1 to 4 matching basis, which implies a 20% Federal match.

All of the above programs can be extremely beneficial to the State Museum at different times. For instance, should the Museum have an opportunity to acquire through gift a desirable collection, the NEA's "Catalog" program, "Visiting Specialist" program, and "Utilization of Museum Collections" program all could assist with the proper cataloguing, storage, and exhibition of the new collection. By establishing an apprenticeship program for exhibit preparators and carpenters, the Museum could gain some much needed extra help with changing exhibitions. The "Special Exhibitions" program could help with the cost for acquiring traveling exhibits, and the "Wider Availability of Museums" program could offer assistance with the cost of cooperative programs between the Museum and the surrounding school district and to promote the use of non-print media by the Museum.

Department of Education

Through DOE's Environmental Education Program funds are available to support research, development, pilot and demonstration projects dealing with man's relationship with his natural and man-made surroundings. Community education projects are supported, which could take the form of exhibitions mounted at the State Museum. In addition, teacher training programs in environmental education could also be funded through this source.

General Services Administration

National historical publications and records grants are available for collecting, preserving, arranging, and creating written descriptions of records of historical interest and for publication in book or microform editions of papers and documents of national historical significance. Although funds are not available to purchase collections, the expense of staff time to collect and care for collections and create a context which illustrates the national historical significance of the archival material can be funded.

National Trust for Historic Preservation

This private national institution offers project grants to help nonprofit member groups retain professional consultants to help increase the quality of programming and they sponsor conferences on historic preservation topics and offer technical assistance for the development of these conferences.

American Association for State and Local History

This organization will pay for consultant fees for museums with an active program requiring specific advice regarding conservation, exhibit planning and fabrication, record-keeping, general administration, etc.

Funding from Private Foundations and Major Corporations

Private foundations and major corporations with an interest in the programs of the State Museum should be approached for assistance with operating costs as well as capital funding. The kind of things they could contribute toward may include special exhibitions and education programs. These contributions could help the Museum provide matching funds that are required in order to take advantage of the many NEH and NEA grant programs described earlier in this section. Here again, corporations with major facilities in the region should be concentrated upon. Requests for funds should stress the desirability of having a facility of this caliber in the region as a benefit to their employees and families and as an important supplement to the public schools.

Physical Master Plan

Introduction

This section of the report describes the site planning, architectural, structural, and mechanical aspects of the Physical Master Plan for the State Museum, all of which have been carefully coordinated with the Exhibition Master Plan described in the following section.

The discussion of the site includes five major segments: Site Location, Site Description, Site Use, Site Circulation, and Site Security. The Site Use segment describes the aerial tramway, the pedestrian bridge, elevated nature walkway, nature trails, and the parking areas.

The major conceptual architectural designs, which have been formulated to meet criteria set forth in <u>Section 4 - Facility Program</u>, are described as follows: Architectural Concept, Building Materials, Future Expansion, Building Organization, Structural Concept, Mechanical Concept, Fire Protection, and Building Security. The conceptual designs, which will be developed further during future design phases, are illustrated with model photographs, building plans, and section drawings. Although the designs are conceptual in nature, they illustrate the basic principles upon which future, more detailed designs will be based.

Finally, a chart is included outlining Conceptual Design Gross Area Calculations and a Summary of Net Exhibition Areas.

In addition to the unique and exciting Exhibition and Education Programs envisioned, there are two unusual aspects to this project that will make a visit to the new State Museum a multi-dimensional experience. The first aspect is the extraordinary site along the Saluda River, and the second is the proximity of the State Museum to the Riverbanks Zoo.

The extensive site, much of which will be kept in its natural state, will be used for the creation of nature trails and an elevated nature walkway. The nature walkway will connect the Museum, situated high on the top of a bluff overlooking the river, with the old State Road running parallel to the river down below. Both the trails and the elevated walkway will incorporate outdoor exhibits to enhance the Museum's natural history education and exhibition programming. The building has been designed to take advantage of this magnificent site by including several outdoor terraces and by providing other views of the natural areas to the north and west of the building.

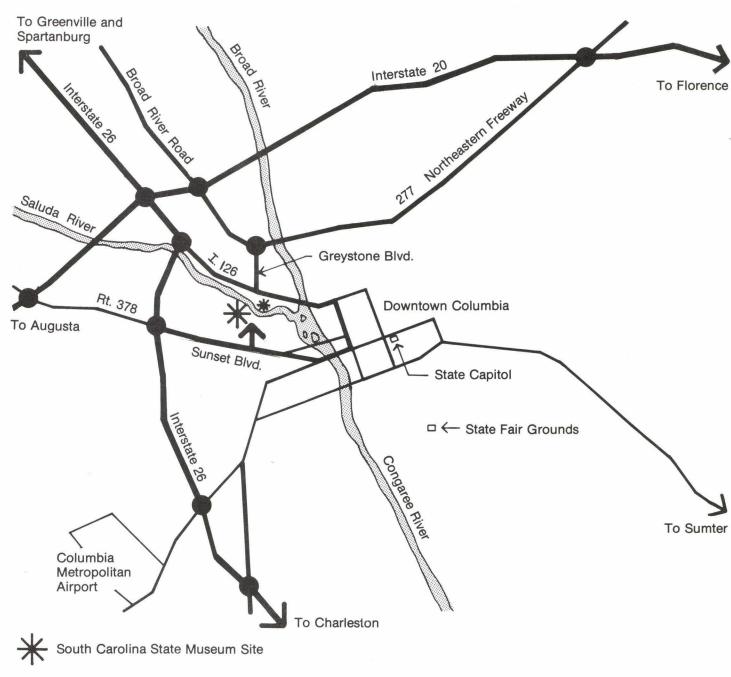
The second significant aspect to this project is the proximity of the State Museum to the Riverbanks Zoo. The proposed aerial tramway and plans to construct a pedestrian bridge across the Saluda River will provide two appealing means of connecting the two institutions. The bridge will allow for a more complete utilization of the site on both sides of the river for recreational purposes. Both the bridge and the tramway will provide an opportunity for the Museum and Zoo to offer meaningful joint exhibition and education programming and will allow for the sale of reduced fee combined tickets to both institutions, which should dramatically increase the visitation potential of both facilities.

SITE LOCATION

The site selected for the new State Museum appears to be an ideal one, as it is located just west of the city of Columbia, the State Capital, and almost exactly in the geographical center of the state of South Carolina. This location is easy to reach from all of the state's population centers, because it is easily accessible from the highways and interstates connecting the major cities of South Carolina. The site has been made available by the South Carolina Electric and Gas Company for a \$1 per year lease for 99 years. This is being done with the cooperation of the Riverbanks Zoo, which is currently in control of the property.

Interstate 26, coming from Charleston in the south and connecting with Green-ville and Spartanburg to the north, passes near the site. This highway also provides an easy connection to the Columbia Metropolitan Airport. Interstate 20, intersecting with Interstate 26 north of the site, goes to Florence. Access from downtown Columbia is via Sunset Boulevard, a major artery. From Sunset Boulevard, the site is reached by means of Seminole Drive and Mohawk Drive. The South Carolina Department of Highways and Public Transportation has reviewed these access roads and stated that they are currently adequate to handle the anticipated Museum traffic without alteration or improvement. Figure 8 - Site Location shows the location of the site with respect to the interstate highways, downtown Columbia, the Saluda River, and the Riverbanks Zoo.

Located on the southwest side of the Saluda River, the Museum site is opposite the Riverbanks Zoo on the other side. This close proximity to the Zoo will strengthen both institutions, allowing for mutual reinforcement through supplementary and complementary programs. It will also make it possible to offer combined, reduced-rate tickets for visitors who wish to visit both institutions.



* Riverbanks Zoological Park



SITE DESCRIPTION

The 52-acre site, located on the southwest bank of the Saluda River, can be subdivided into several distinct regions: the high ground, with some degree of sloping along its boundaries; the bluff, with a steep slope facing north; the flood plain directly adjacent to the riverbank containing the old State Road and an old mill site, and a small creek and cove carved out of the hill-side (see Figure No. 9 - Site Development Plan).

Natural growth on the high ground includes some pines on the highest areas that grade into an oak and hickory forest on the slope. The most fragile environment of all is the bluff area, where the plant population is totally dependent upon seepage of ground water from above. The trees on the bluff are very tall, their leaves creating a high, dense canopy during the summer months. During the summer it is not possible for someone standing at the top of the bluff to look straight ahead and see across the river, but it is possible to look down the bluff through the relatively bare tree trunks to see the vegetation on the slope. During the winter months, views are possible through the trees. This area is the home for some interesting and unusual plants, including cranefly orchids (Tipularia discolor). Mountain laurel (Kalmia latifolia) is found on the slope.

Large granite boulders protrude from the side of the hill leading down to the old State Road, which runs roughly parallel to the riverbank. Here the American hop hornbeam (Ostrya virginiana) grows in a scattered fashion. The ruins of an old mill can be found near the river.

The least fragile of the habitats is the flood plain, where the river over-flows from time to time. The plants inhabiting the flood plain are fairly typical species, including the river birch (Betula nigra) and river oats (Uniola latifolia). The creek/cove area has an abundance of paw-paws (Asimina triloba) in addition to miscellaneous hardwoods.

On the northwest end of the site a path over 100 yards wide has been cut through to allow for the passage of power lines. This area has little vegetation. South of the site is a residential area, while to the west there is a recreational area with several ball fields.

SITE USE

There are several factors that influence the use of the site. One major factor is the preservation of the delicate natural balance that exists on the bluff, which dictates that the building should not encroach upon this area. Other factors include the aerial tramway connection to the Riverbanks Zoo and parking.

Aerial Tramway

The aerial tramway was selected as a means of connecting the Zoo with the Museum because in addition to spanning the river, it also will span over the delicate bluff environment. This would not be true of either a monorail or a gondola system, both of which would require numerous structural supports within the bluff area. In order for the aerial tramway to serve as a practical connection with the Riverbanks Zoo, the terminal on that side of the river will have to be close to the present Zoo entrance. The need to create a connection from this point on the Zoo side to an area at the top of the bluff on the Museum side of the river dictated the location for the aerial tramway entrance on the Museum side.

Programmatic considerations determined that the tramway entrance on the Museum side of the river should be directly connected to the Museum Lobby. A major factor affecting the choice of location was accessibility from the Museum parking area without having to pass through any ticketed areas in the Museum building. At the same time, it was felt that the tramway entrance should be strategically placed to attract and invite people arriving at the Museum on the tramway to purchase a ticket and visit the Exhibition Areas.

Pedestrian Bridge, Elevated Nature Walkway, and Nature Trails

A second means of establishing a connection between the Museum and the Zoo is through the construction of a pedestrian bridge over the Saluda River. This will allow people who are on the site's nature trails to cross over the river without having to return to the Museum to purchase a tram ticket. About 100 yards down river from the south boundary of the Museum site the abutments of a bridge burned during the Civil War still exist. Several years ago the Riverbanks Zoo purchased the steel to construct a footbridge using those abutments, but it has not as yet been constructed. The bridge should be completed as a Museum/Zoo project as a complement to the aerial tramway.

In order to create a connection from the Museum to this bridge, a nature walk-way, elevated on posts, will be constructed to allow visitors to proceed from the Museum down the southern edge of the bluff to the old State Road at the bottom with a minimum of disturbance to the delicate ecological balance that exists on the bluff. This walkway would include a series of wood platforms containing interpretive site exhibits. The best place for the walkway was determined to be near the south side of the site because this will not affect the major and most delicate areas of the bluff. This is a very interesting part of the site to walk through, and it provides the most direct connection between the Museum Lobby and the bridge across the river.

The nature trails to be created on the site will include outdoor interpretive exhibits.

Parking

Another major factor in determining site use is the fact that there is very little level ground suitable for parking. It was determined that in order to

provide adequate parking for Museum visitors, almost all of the high ground would have to be used for primary parking areas. The negative impact of such extensive parking on this part of the site will be reduced by the provision for only 300 parking spaces on the high ground and another 200 spaces for overflow parking under the power lines on the northwest part of the site. This will allow more of the natural vegetation on the site to be retained.

The primary parking areas which are close to the Museum will be broken down into three distinct sections, with vegetation areas between them to soften the effect of such extensive parking. In addition, a heavy buffer of vegetation will be retained between the entry roadway and the parking lots. A second area of dense vegetation will be retained to screen the entry road from the residential neighborhood to the south.

SITE CIRCULATION

There will be four means of arriving at the Museum Lobby: by automobile, bus, aerial tramway, or by walking across the bridge from the Zoo. (See <u>Figure</u> No. 9 - Site Development Plan.)

Autos and buses will enter the southwest corner of the site from Seminole Drive. They then will proceed along the entry drive, roughly paralleling the southeast boundary of the site, to a turn-around and drop-off area in front of the Museum (see Figure No. 10 - Site Plan Detail). Along the entry road will be three access points to the three sections of primary parking. The section closest to the building will include a large area for bus parking. Site circulation has been planned so that school groups or other groups arriving by bus will be able to proceed from this bus parking area to the Museum entrance without crossing any vehicular roadways. This same pathway will extend to the northwest, across a small bridge, over the creek to the remote parking area under the power lines. Visitors parking in the primary parking areas also will be able to proceed to the Museum via another pedestrian path running roughly parallel to the entrance road between the road and the parking areas. This path will terminate at a formal garden in front of the Museum (see Figure No. 10 - Site Plan Detail).

Along the Museum entry road, before the turn-around and drop-off area, a service road will branch off to provide access to the service area at the east end of the building.

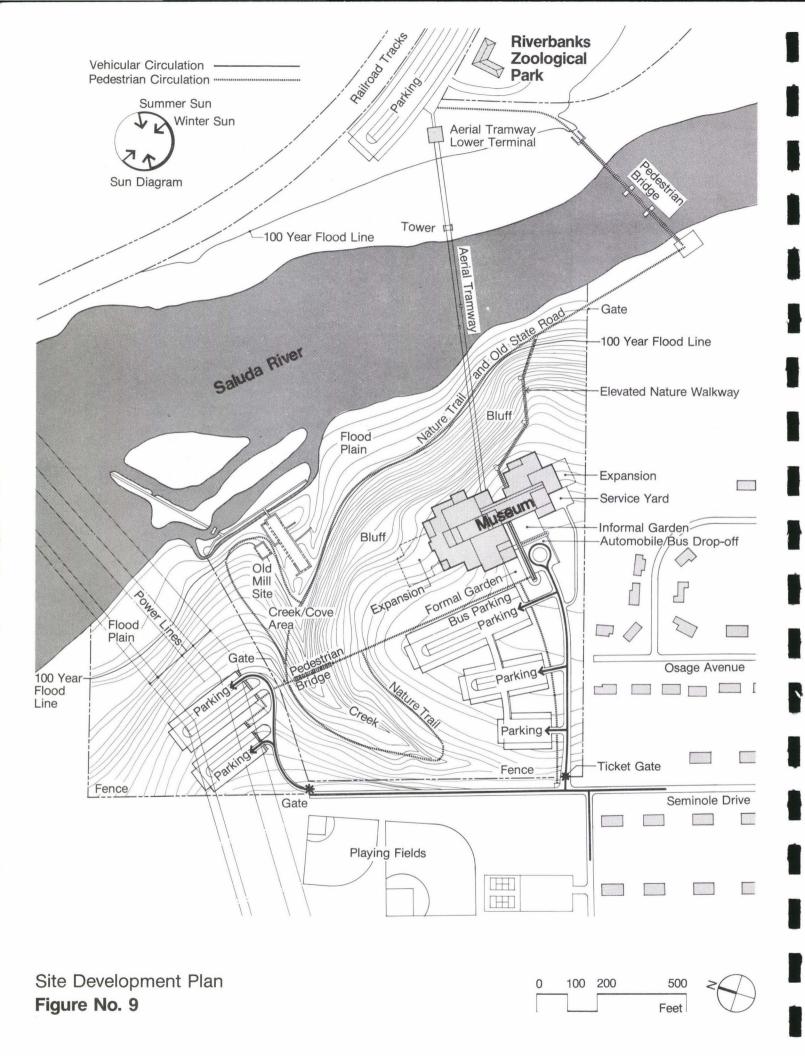
A terrace immediately off the northwest corner of the Museum Lobby will serve as the aerial tramway arrival point. Access to the elevated nature walkway also will be from the north side of the Lobby. The elevated nature walkway will connect with the old State Road, running roughly parallel to

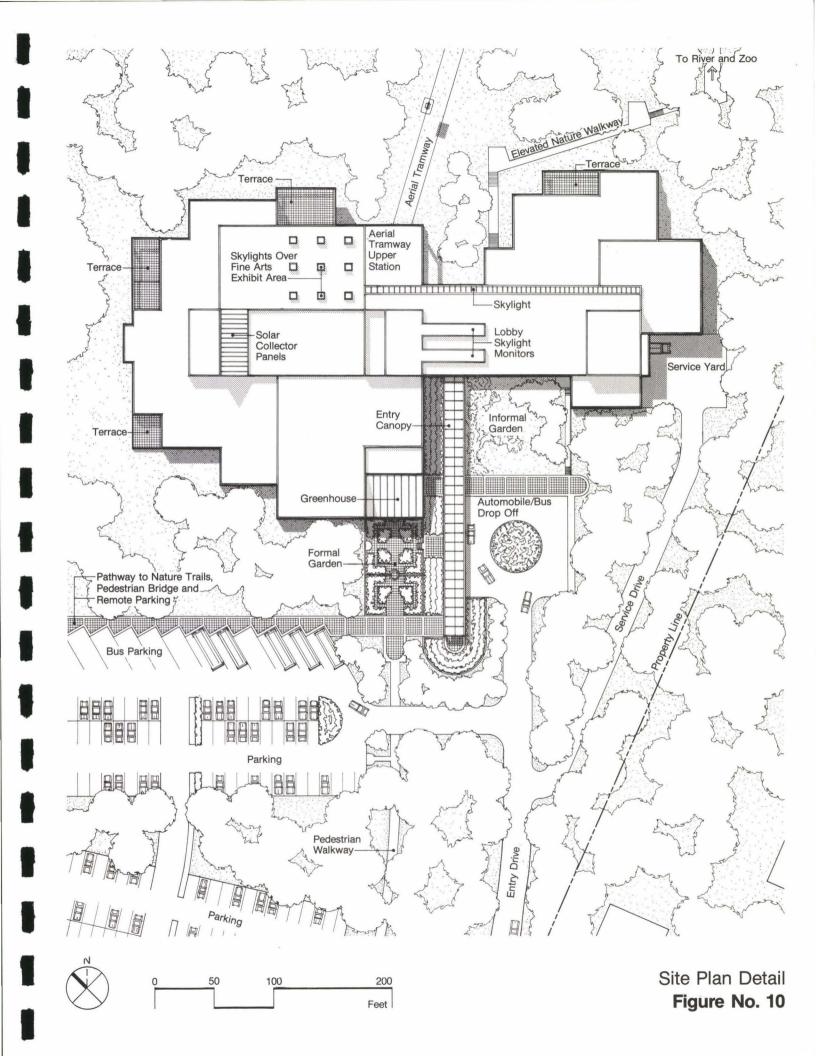
the banks of the river. Visitors will be able to proceed along this road to the bridge in order to cross the river. They also will be able to proceed farther on the old State Road to the old mill site, with its interpretive exhibits, then pass through the creek/cove area, and eventually connect with the path leading to the overflow parking area.

Connections to the elevated nature walkway, nature trails, and the Museum parking will be possible without going through any ticketed Museum area. However, ticket kiosks will be located at the two entrances to the site for the collection of parking fees.

SITE SECURITY

The site will be secured along its three non-river boundaries by means of an attractive fence with gates at the three entrances to the site (the third entry gate will be at the old State Road entrance to the site along the south boundary). This precaution will not only control potential vandalism, but will also help to preserve the natural character of the site. In addition, the Museum will be able to develop interpretive exhibits throughout the site without providing extensive localized security devices. It is envisioned that the fence will be placed within existing vegetation and then heavily planted with vines.





ARCHITECTURAL CONCEPT

This basically linear building, situated on the high ground parallel to the top edge of the bluff, separates the parking, vehicular, and pedestrian entry activities from the natural environment of the bluff, the flood plain, and the river. By necessity, one side of the building shows the influence of man because of the need for paved parking areas, entry roads, and walkways. The other side, however, is left in a predominantly natural state.

The architectural character of the building is derived from a desire to express, both functionally and symbolically, these two different aspects of the site. The visual penetration through the glass-enclosed Lobby creates a link between the two sides so that visitors arriving from either the tramway on the north side or the vehicular area on the south side will understand the difference between these two environments.

The south side of the building, with its glass-canopied entrance and gardens, has been designed to create a strong sense of entry and anticipation for the Museum visitors. The south orientation of this side of the building severely limits the extent of fenestration that is possible into the Exhibition Areas because of potential conservation hazards to valuable Museum artifacts. The articulation of the predominantly solid massing, the introduction of the greenhouse structure, and the use of the formal and informal gardens give the south side of the building a sense of scale for visitors arriving at the entry by automobile, bus, or by foot.

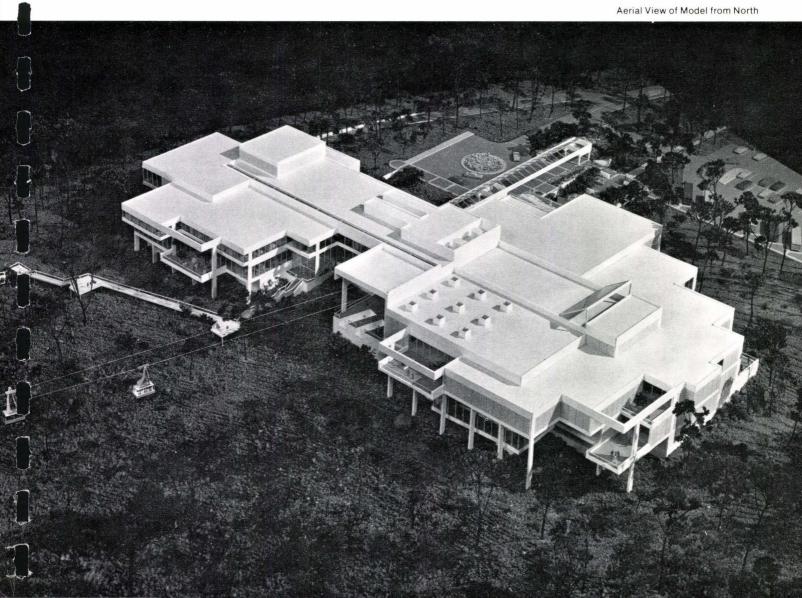
The axis of the main vehicular road is visually terminated in an informal garden, partially surrounded by the building. This informal garden provides a pleasing counterpoint to the vertical walls which appear to anchor the building firmly to the high ground. A formal garden in front of the two-story greenhouse and the patterned paving material will create a pleasing environment for visitors walking from the parking areas to the Museum entrance.

The north side of the building responds to the magnificant view down the bluff. The upper floors are cantilevered beyond the lower floors, giving the impression that the site is actually penetrating into the lower part of the building. It is intended that the building be perceived as hanging out over the bluff, although in fact it does not actually do this, so that Museum visitors will be encouraged to look down the slope of the bluff toward the river below. The overhangs created by the cantilevered floors will help to control natural light within the building.

The north side of the building is also articulated with cantilevered terraces accessible from the building, which will give the visitor outdoor views down the bluff to the river. These terraces are entered from both the Exhibition Areas and some of the Visitor Support Areas.

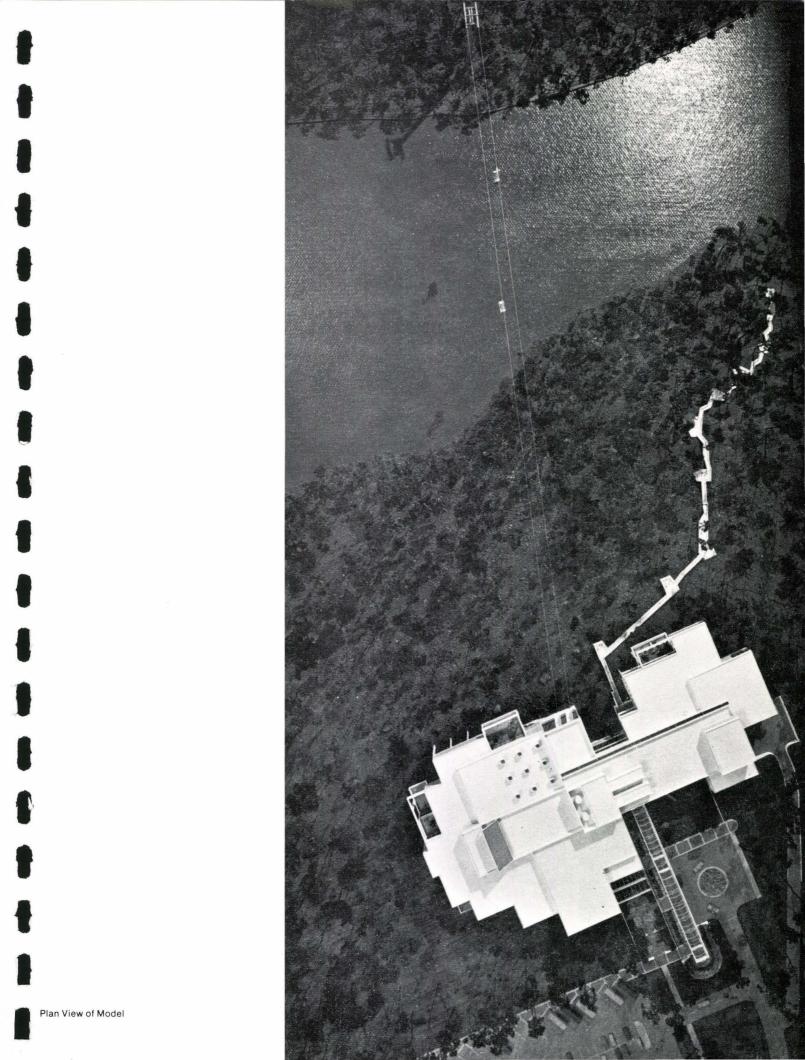
The following four pages of model photographs (Figure Nos. 11 through 14) show the building exterior from various vantage points.





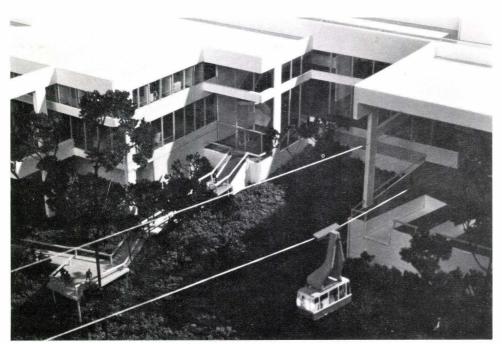








View of Model From Bluff



View of Model with Aerial Tramway Station on Right

View of Model Showing Terrace at Multi-Purpose Meeting Room



BUILDING MATERIALS

The building's basic exterior construction material will be concrete. The structural frame will be sand-blasted or bush-hammered light buff-colored concrete with darker precast exposed aggregate panels filling in the solid portions of the walls.

All glass areas will be double-glazed with bronze anodized aluminum frames. The window wall system will allow for insulated opaque panels within its framework. With this flexible fenestration system, it will be possible for non-transparent areas to be provided for in many of the office areas as changing needs dictate. In addition, some operable windows will be provided in the building's administrative areas. The clear glazing in the office areas will extend to a height of seven feet, above which will be insulated opaque panels. Glazed areas have been kept to a minimum in order to make the building as energy-efficient as possible. Actual glazed areas make up only 16% of the total wall area of the building.

FUTURE EXPANSION

Although the building has been designed to meet the needs of the South Carolina State Museum for several decades, it is conceivable that at some time in the future additional space will be needed for an expansion of either the exhibition or support spaces. For this reason the building has been designed to allow for future growth without in any way compromising its initial functional integrity.

The exhibition spaces can be expanded to the west by continuing the passageways on both sides of the central exhibit well. If at some time in the future it is decided that a Planetarium should be included in the Museum, the building design will allow for such an addition by including it as part of the exhibition expansion to the west. The building also can be expanded to the east and over the service yard if additional support facilities are needed in the future. An efficient continuation of building mechanical systems also is possible with this building design.

BUILDING ORGANIZATION

Located on the high ground, the building is organized parallel to the top edge of the bluff. The Lobby, which will serve as the major entry point for Museum visitors, is roughly in the center of the building. To the west there are three levels of Exhibition Areas with two mechanical penthouses above. To the east there are three levels of Museum Support and Visitor Service Facilities with a single mechanical penthouse above (see Figure No. 20 - Building Sections).

The two-story Lobby (see Figure No. 15 - Third Level Plan) will collect visitors entering the building from the covered entrance, from the aerial tramway arrival point, and from the elevated nature walkway. The two-story high glass north wall of the Lobby will offer views of the natural vegetation on the site. Additional natural light will be introduced to the Lobby space by means of monitor skylights facing south. Visitors entering from the front of the Museum will be able to see the aerial tramway, which will dock at a terrace five feet below Lobby level to the northwest. Direct access from the Lobby to the tramway terrace will be provided.

All visitors to the Exhibition Areas (see Figures No. 15, 16, and 17 - Third, Second, and First Level Plans and Figures No. 21, 22, and 23 - Third, Second, and First Level Exhibition Plans) will enter and leave through the Ticketing/Information/Control Area immediately adjacent to the Lobby on the third level of the building, which is the top exhibition level. This area will provide control of both the ticketed and non-ticketed areas of the building because of its strategic location off of the Lobby.

Proceeding into the Exhibition Areas after passing through the Ticketing/Information/Control Area, the visitor will enter the Exhibition Areas Foyer, containing a small exhibit well. From this exhibit well it will be possible to view "The Liberty Tree" exhibit located on the level below. This space will serve as a gathering area for visitors before they enter the Orientation Theater. To the west of this foyer area there will be a larger three-story exhibit well with escalators connecting all three exhibition levels. A glass enclosed elevator at the far west end of the exhibit well will provide a second means of vertical circulation. This central exhibit well will provide a point of orientation for Museum visitors. Surrounding the exhibit well will be an open circulation corridor on all three levels formed by double columns to the north and south of the central exhibit well.

Large open exhibition spaces will surround the central exhibit well on three levels. Within these exhibition spaces several other multi-level spaces, created for the placement of dominant image exhibits, also will provide a secondary means for visitors to pass from one level of exhibits to another.

The Museum's freight elevator will provide direct access to the Exhibition Areas on both the second and third levels. On the west end of the building removable panels at the end of the main passageways on each of the three exhibition levels will allow a secondary means of service access to the Exhibition Areas for the installation of large exhibit objects.

A two-level greenhouse will be located on the south side of the Second and Third Level Exhibition Areas. It will be possible to enter this Greenhouse from both exhibition levels and to view the formal garden in front of the building from the upper level within the Greenhouse. Exhibits in this Greenhouse will be closely related to exhibits immediately inside the building on the Second Level (see Figure No. 22 - Second Level Exhibition Plan).

Several exhibit areas on the north side of the building will offer views out to the site, allowing indirect north light to enter these spaces. The choice of this orientation for views to the outside and the carefully chosen location of the window openings will eliminate potential conservation problems that result when direct sunlight is allowed to enter exhibition spaces. Also on the north side there will be several elevated terraces, where visitors can walk outside to view the site. Because these terraces are elevated, Museum visitors will not be able to gain access to the site, nor will people on the site be able to enter the Exhibition Areas from these terraces. The views out of the Exhibition Areas and access onto controlled terrace levels will be carefully integrated with the exhibition sequence to provide not only a supplement to the exhibition matter, but also a change of pace from the black box environment of the Exhibition Areas.

On the north side of the Third Level, a large exhibition area will provide adequate space to mount major temporary exhibitions. Demountable partitions that can be installed along the edge of each 24 ft. by 24 ft. module within this space will make this large area completely flexible. In addition to having the capability of being divided into nine 24 ft. by 24 ft. modules, the modules will be combinable in various configurations to create galleries ranging in size from 24 ft. by 24 ft., 24 ft. by 48 ft., 48 ft. by 48 ft., etc. This flexibility will allow for the mounting of several small and medium sized exhibitions at one time.

Each module will have a 5-1/2 ft. square skylight with an integrated artificial lighting system. These skylights will provide a clear view of the sky from within the galleries to supplement views out to the terraces and site from the north side of the main gallery area. The vertical shaft of each skylight will prevent any direct sunlight from entering the galleries. In addition, each skylight will be equipped with a motorized door to control the amount of natural light entering the spaces. If it is desirable for a particular exhibit to eliminate natural light entirely, this can be accomplished by simply closing the skylight door. All the skylight doors will be closed at night for security reasons and to save enery.

Supplementary artificial lighting will be provided by means of adjustable incandescent light fixtures mounted on gimbel plates contained within a light slot around the base of each skylight. The angle of the artificial light slot will be carefully positioned with respect to the walls of each module in order to prevent frame shadows resulting from too steep a lighting angle or glare off the surface of paintings or exhibit cases, which can result from a lighting angle that is too shallow.

At the northeast corner of the Lobby a spine will proceed eastward, connecting several visitor service facilities, including the Museum Store, the Auditorium, the Multi-Purpose Meeting Room, the Budget Fast Food Dining area, and the Classrooms. Also included within this spine are the Public Toilets, Locker Area, Coat Storage for School Groups, Coat Check Room, First Aid Room, etc. At the connection point between the Lobby and the circulation spine, a glass-enclosed stairwell will take visitors either down one-half a level to connect to the elevated nature walkway or up to the next level, containing the Museum's staff support areas. An elevator also will connect to this fourth level (see Figure No. 20 - Building Sections).

The separation of administrative staff areas from other support areas, which often occurs in museums, can lead to a lack of understanding of the important interrelationships among all the support tasks that must be carried out in order to operate a museum efficiently and present high quality programs. For this reason, the Museum's administrative facilities have been located in the same area as the curatorial work spaces, exhibition preparation areas, and the Education Program staff offices, which will promote good communication among the various support groups (see Figure No. 19 - Fourth Level Plan).

The main service entrance to the building and the Collection Storage Areas will be on the Second Level of the east portion of the building. The Collection Storage Areas will be connected to the staff work areas by means of a 20 ft. by 20 ft. freight elevator, which also will provide good access to all levels of Exhibition Areas. In addition, the Collection Storage Areas will be immediately adjacent to the Second Level Exhibition Areas (see Figure No. 16 - Second Level Plan), which will allow some of the Collection Storage Areas to be opened to the public as a "visible" storage system if this is desired. The immediate adjacency of these two areas also will allow for complete flexibility with regard to the amount of Collection Storage Areas that will be made accessible to the public.

STRUCTURAL CONCEPT

During the planning process several different structural concepts for the building were investigated. The economics of the system; the flexibility the system would provide, especially in the large exhibition areas; ability to

meet building code requirements, and aesthetic considerations were all evaluated before making a final determination.

The structural concept for the building consists of a poured-in-place reinforced concrete frame. Spanning between the framing girders, supported by concrete columns, will be 3-1/2 ft. wide precast pre-stressed concrete channel beams spaced 8 ft. on center. Cementitious planks will span between the channels. These will provide for acoustical absorption within the exhibition and other public spaces. A concrete slab will be poured over the channel beams and the cementitious planks.

The First Level will have a concrete slab on grade. The poured-in-place concrete frame, exposed on both the interior and exterior of the building, will be bush-hammered or sand-blasted to give it a textured finish. The ceiling structural members will be painted, along with all exposed mechanical components integrated with the structure. Precast exposed aggregate panels will span between the structural frame on the exterior. The building foundation will be spread concrete footings. It will be very important to obtain detailed subsurface information within the proposed building area before more conceptual foundation designs can be made.

MECHANICAL CONCEPT

Basic Design Assumptions:

Columbia, South Carolina.

34° north latitude.

217' elevation A.S.L.

Winter: 24°F (97.5%).

Summer: 95° DB - 75° WB (2.5%).

Estimated cooling load: 300 sq.ft./ton.

190,000 sq.ft./300: 633 total tons.

Estimated heating load: 15 B.T.U./sq.ft. (including ventilation).

190,000 sq.ft. x 15: 2,850,000 total B.T.U.H.

The following descriptions of the mechanical systems are meant to be conceptual in nature. More detailed study will be made during the next phase of work.

Heating:

Two 60-B.H.P., natural gas-fired hot water boilers, located in the east pent-house, with zone pumps, will supply hot water to duct heating coils and radiation units throughout the building (see Figure No. 18 - Fifth Level Plan).

Cooling:

Three 230-ton centrifugal chilled water generators located in the central penthouse with a cooling tower located adjacent to the central penthouse, will supply chilled water to cooling coils in central station air handling units (see Figure No. 19 - Fourth Level Plan).

Air Distribution:

High pressure, central station air handlers will supply variable air volume terminal boxes throughout to provide heating, cooling, and ventilation. The units should employ full economizer controls and enthalpy controls for maximum operating efficiency. Units will be installed in the east, central and west penthouses.

Humidity:

A complete vapor barrier will be provided for the building envelope; double glazed windows will be used throughout.

A natural-gas-fired, low pressure steam generator will supply steam to manifold-type humidifiers in the air distribution systems. Return air humidstats will maintain the desired humidity level of 50%.

Dehumidification will be accomplished by cooling coils located in the central station air handlers.

Temperature/Humidity Control Systems:

Central control systems will provide complete manual or automatic operation of the various systems. Also, system monitoring, such as alarms, dirty filters, smoke, and on-off operation will be provided by the central control system. The mechanical system will be zoned to allow for individual control within different areas of the building, such as exhibition areas, visitor service area, collection storage areas, etc., in order to meet their unique mechanical requirements.

Energy Conservation:

The mechanical system design will incorporate economically feasible energy conservation equipment. Each air handling system will employ an economizer cycle of control designed to utilize outdoor air to provide free cooling whenever moisture and temperature levels permit. Enthalpy controls will be designed for the air handling systems to automatically monitor sensible and latent air temperature to utilize the air source requiring the least amount of energy.

Solar Energy:

Solar energy is feasible to heat domestic water and to supplement the building's heating system. Solar collectors will be installed on the roof areas adjacent to the west penthouse with interconnecting piping to storage tanks buried below grade outside the building.

FIRE PROTECTION

All building areas will be protected by a dry sprinkler system, which will operate in the following manner:

The sprinkler pipes in the protected areas will be dry. Air pressure will be maintained in the sprinkler pipes, and water will be held back at a remote point by a deluge valve. This valve will be controlled by smoke and heat detectors located throughout the protected areas. If a detector is activated, the deluge valve will be released and water will enter the piping system, but no water will be discharged until the individual sprinkler head is fused by the heat of the fire. Two conditions are necessary in order to activate the system: enough smoke or heat to activate the detection system, and enough heat to activate the sprinkler head.

An alarm will sound as soon as the water enters the system. This alarm will be monitored 24 hours a day by the Museum security staff, as this will allow someone to put out the fire with portable extinguishers before the actual sprinkler head is fused. Portable dry chemical extinguishers will be located in unobstructed areas throughout the Museum. These dry chemical type units for Class A, B, and C fires will have a 10 lb. capacity and U.L. rating 4A-40BC. Small units will be used so that they can be handled easily by all members of the Museum staff. The air pressure in the piping also will be monitored, as a loss in pressure due to a leak or damage in the piping will sound the alarm.

This type of system will help prevent accidents. For instance, if someone working in a sprinklered area physically damages a sprinkler head or the piping, water will not be discharged -- it will be held in check by the remote deluge valve.

BUILDING SECURITY

The Collection Storage Areas will not be located immediately adjacent to the curatorial staff offices. This is due to two primary factors: first, there was a higher priority for having all major divisions of the staff located together and second, the site requires a multi-story building with limited area on each level. It is therefore very important to have a special intrusion alarm system for the Collection Storage Areas. A security system will also be provided for the entire building. The following is a general description of both the building security system and the special provisions for the Collection Storage Areas.

The intrusion alarm system will be electrically supervised with battery standby and will be of the ultrasonic motion detection type combined with magnetic contact switches on doors as follows:

- 1. A main control panel and lighted graphic annunciator will be installed at the Security Office. The control panel/annunciator will contain an "access-secure" switch and a separate "secure, by-pass, alarm and trouble" light for each zone. Each door switch or motion detector will constitute a zone.
- 2. Each perimeter door will be equipped with a magnetic contact switch.
- 3. Each perimeter room with windows will be equipped with motion detectors.
- 4. Each storage room door will be equipped with a magnetic contact switch and a by-pass switch mounted adjacent to the door. Each by-pass switch will be keyed differently. Storage room by-pass keys will be kept in the Registration Area and given out to the Curators from this location. A remote annunciator panel to indicate the status of each storage room door will be installed in the Registration Area. This annunciator panel indicates "secure", "by-pass", "alarm", or "trouble" for each storage room.
- 5. The system will be set up for an occupied/unoccupied mode of operation as follows:

Occupied

- a. Perimeter emergency exit doors, storage room doors, and any unoccupied rooms with motion detectors will be placed in the "secure" condition. Violation of any of these devices will activate a local alarm and illuminate the "alarm" light at the annunciator panel.
- b. Perimeter public doors and remaining occupied rooms with motion detectors will be placed in the "access" condition.

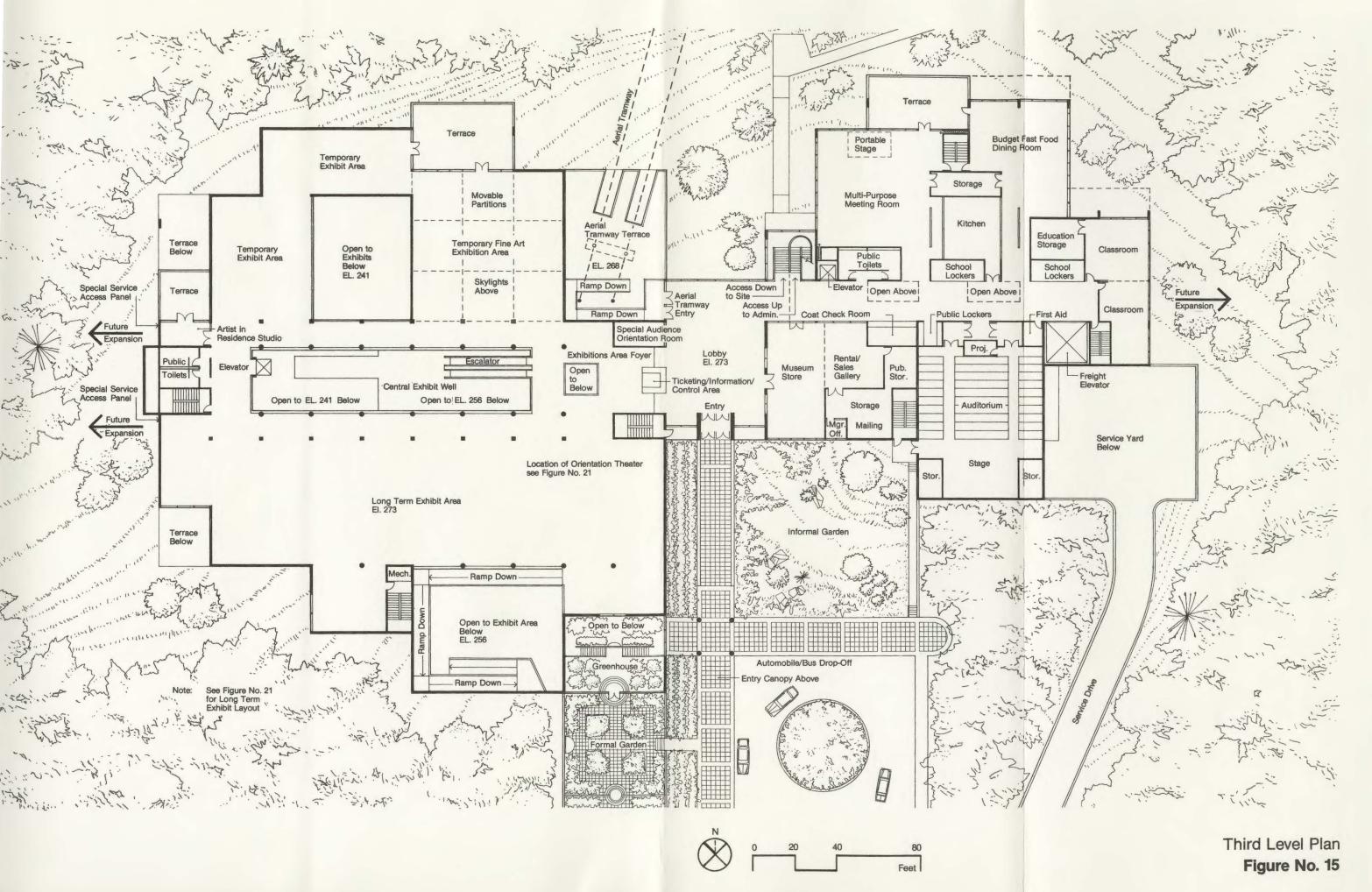
Unoccupied

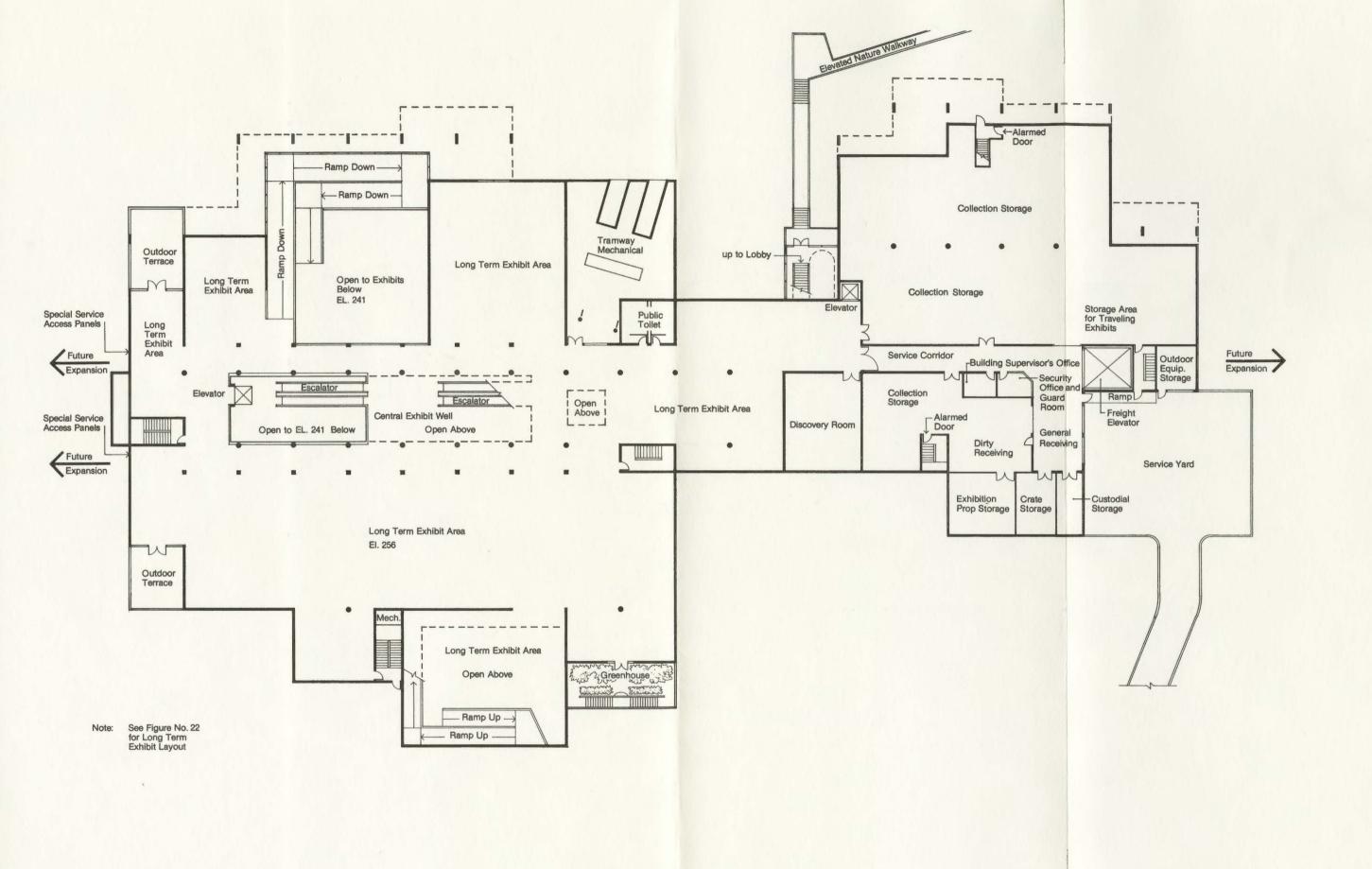
- a. All zones will be placed in the "secure" condition.
- b. A key-operated switch which connects the entire system to the local police department via a leased telephone line will be located at the Security Office.

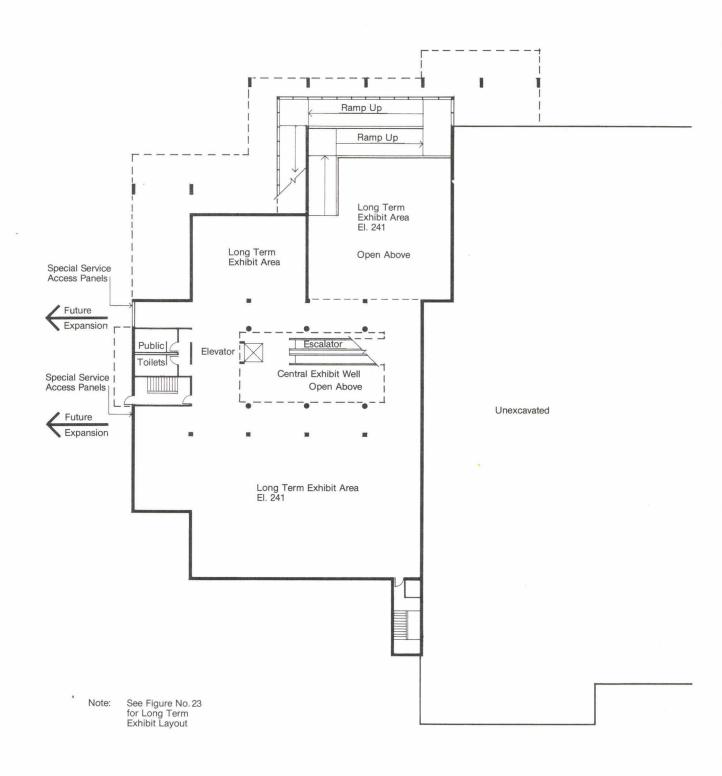
Conceptual Design Gross Area Calculations (1)

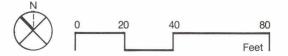
First Level	21,000
Second Level	70,500
Third Level	69,000
Fourth Level	27,000
Fifth Level	2,500
TOTAL GROSS AREA:	190,000 sq.ft.
Summary of Net Exhibition Areas (2)	
First Level	13,500
Second Level	37,500
Third Level	29,000
TOTAL NET EXHIBITION AREA:	80,000 sq.ft.

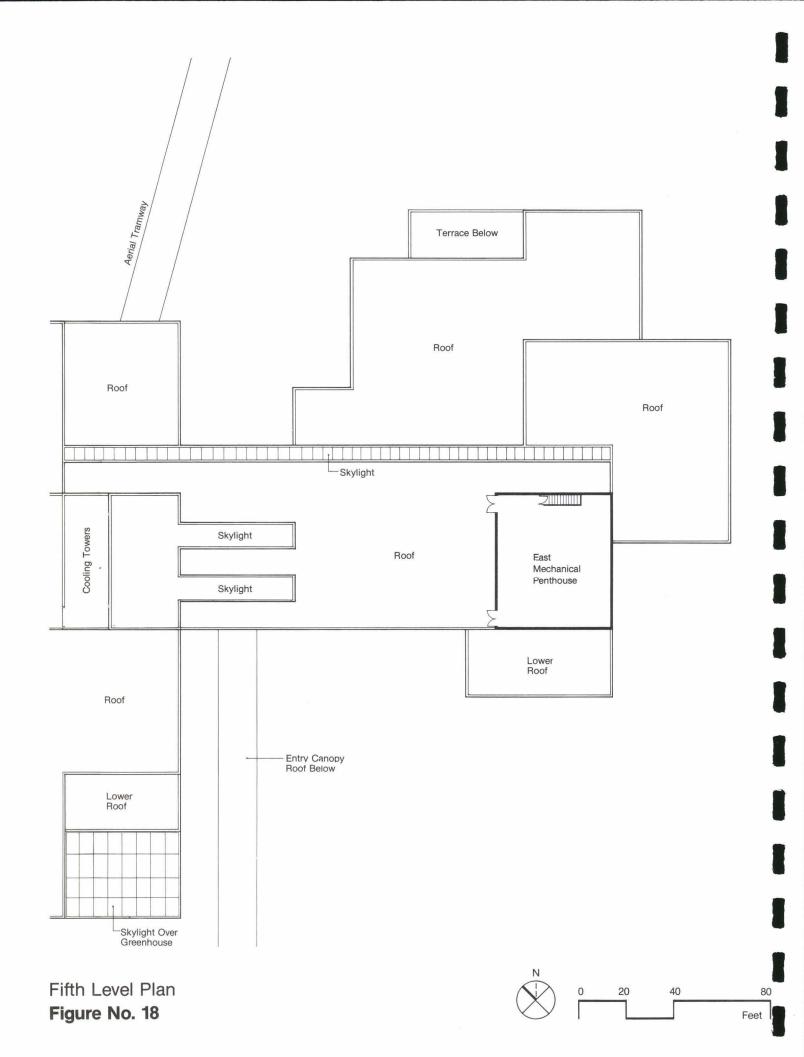
- (1) These figures represent a breakdown by level of the total gross areas of each level of the conceptual architectural plans shown on the preceding pages of this section.
- (2) These figures represent a breakdown by level of the net areas of exhibition area on each level of the conceptual architectural plans shown on the preceding pages of this section. These net areas include localized circulation paths within the Exhibition Areas but not major horizontal or vertical circulation systems within these areas.

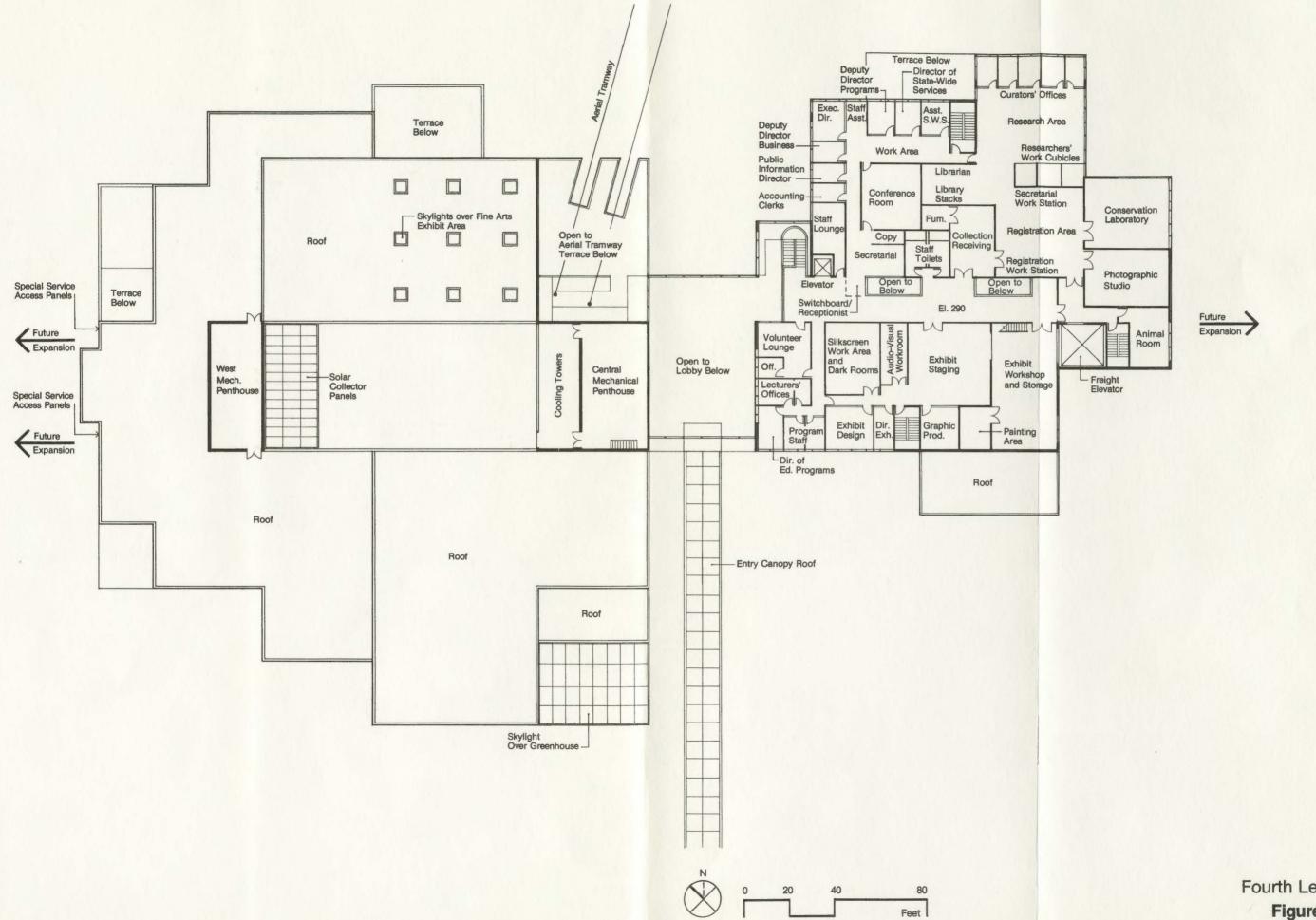




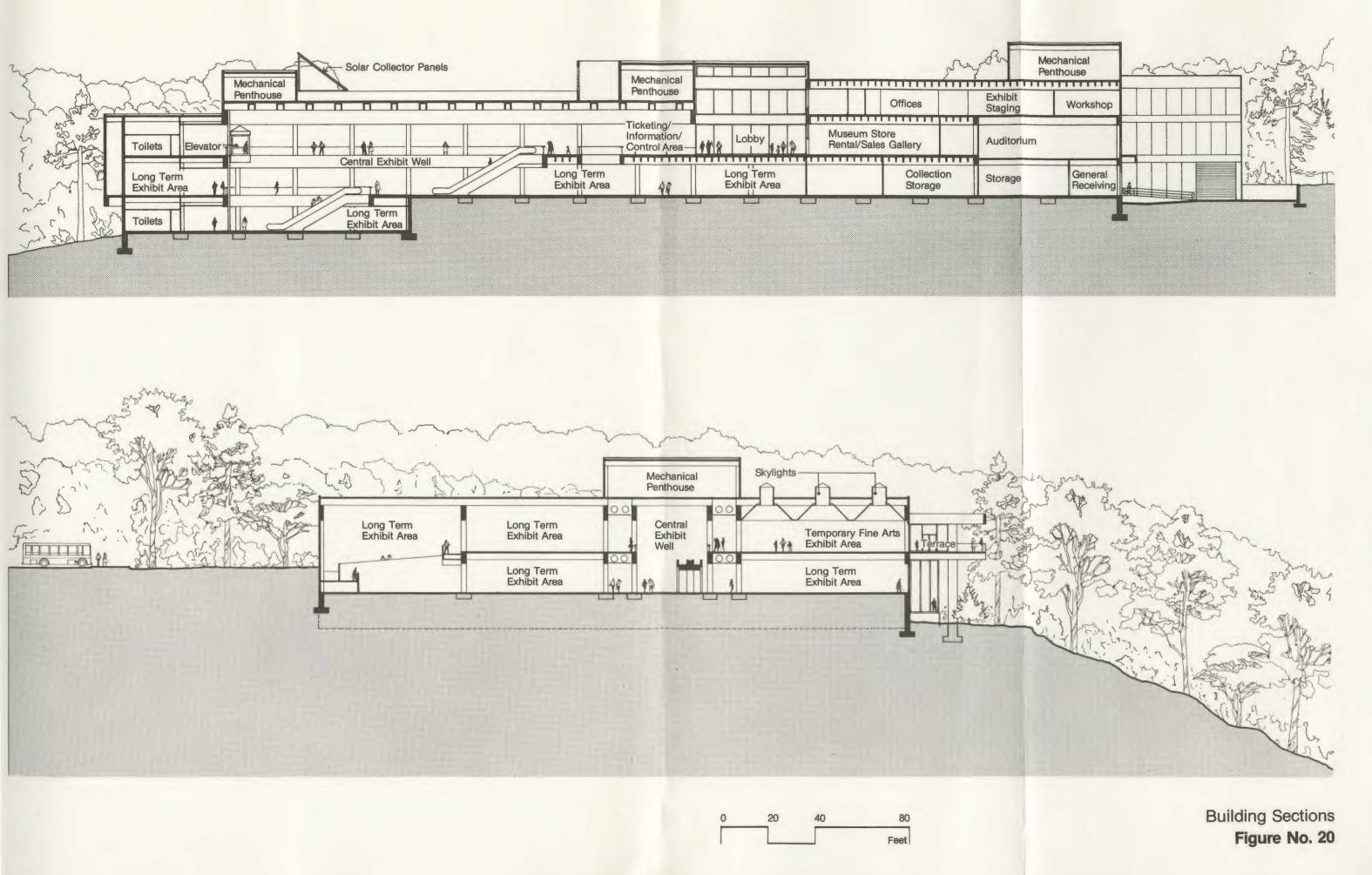








Fourth Level Plan Figure No. 19



Exhibition Master Plan

Introduction

This section includes a written overview of The Exhibit Experience, Visitor Tour Routes and Options Within the Exhibits, Some Exhibit Highlights, and an overview of Exhibit Presentation Techniques; Exhibition Plans, which illustrate the overall floor plans of the three levels of Exhibition Areas; Exhibit Sketches of five specific Exhibition Program spaces, and the Exhibition Outline. All of this work was based on the Exhibition Program objectives and the schematic exhibit plans developed for this Museum.

A great deal of research was conducted in support of the development of the Exhibition Outline, both by the Museum staff and the exhibit designers. A bibliography of sources is contained in Section 10 - Research Data. The suggestions and guidance of the members and staff of the Museum Commission and other experts within the state have also helped to shape these plans.

The plans, sketches, and outline represent the full Exhibition Master Plan, which is to be accomplished in phases over several years. The outline will serve as a basis for further exhibit design, but is not considered to be complete or final. A great deal of additional research will be done and many refinements will be made as a part of the final research and design phase. The advice of many citizens, scholars, teachers, state personnel, and museum professionals from all over the state will be solicited and carefully considered during the final research and design phase.

The careful planning that has been carried out on behalf of the State Museum is evidenced by the fact that the architecture, programs, and exhibitions all have been planned simultaneously by the staff, the architect/planners, and the exhibit designers. The resulting building design is sympathetic to the Exhibition Program, a fact which will enhance the overall experience of the Museum visitor.

The Exhibition Master Plan must necessarily be implemented in phases, as the total amount of long term exhibits (65,000 sq.ft.) will take several years to develop. It would be impossible to open the Museum in 1984 with all of the long term exhibits in place. The research staff, the exhibit designers, and the production capability within the exhibit industry would be stretched so completely that the high standards of depth, accuracy, and general quality of the exhibits would have to be compromised. Therefore, it is recommended that half of the exhibits be developed for the Museum opening, with the other half developed and installed in a number of planned phases following the opening of the Museum.

The initial exhibits will be defined after careful consideration during the final design phase. Included will be some exhibits to create a dominant image or theme and others to interpret specific subjects. The selection process will also consider the balance of exhibit presentation techniques, the pacing of the visitor's experience, and the combination and relationship of the exhibit elements relating to cultural history, natural history, science and art.

THE EXHIBIT EXPERIENCE

Approaching the Museum from the parking areas, visitors will be able to view outdoor sculpture, a formal garden, and the natural beauty of the wooded site above the Saluda River. Inside the Lobby, they will be welcomed and first introduced to South Carolina. The State's location and shape, state flag and other symbols, and cultural and natural sites will be dramatically presented in colorful banners and sculpture.

After passing the Museum Ticketing/Information/Control Area, visitors will enter the Exhibition Areas Foyer. Here they will become acquainted with Museum exhibits, facilities, and programs by means of both a visitor-activated, light-animated model of the Museum and related rear-lit photographs and text. Visitors will then be able to continue on to the Exhibition Areas or enter the Orientation Theater.

In the theater (see Figure No. 24 - Exhibit Sketch: Orientation Theater) the visitor will experience a dramatic audio-visual presentation giving an overview of South Carolina's cultural and natural history, art, science, and technology. Outstanding personages from four or five periods in South Carolina's history will tell of events, issues, and personal pleasures and concerns in his or her period. The audio-visual presentation will then shift to the primordial beginnings of earth and man and the timeless forces which have shaped South Carolina's natural environment. At the end of the theater presentation, the film will show waves endlessly crashing on a South Carolina beach; the screen will part, revealing a corridor: the natural forces experience tunnel. The audience will then exit through the movie screen, experiencing the feel and sound of the pounding of the surf, the lash of the wind, the force of the water, the effects of heat and cold, the grinding of blowing sand, and the tremors of the earth.

The exhibits following the Orientation Theater will be divided into major chronological periods, each with dominant theme elements surrounded by specific interpretive exhibits. The exhibits will reflect the relationships between cultural history, natural history, science, and art. Graphic images will reinforce the time period and theme within each exhibit area. Each major exhibit will also have a "Study Station" with a detailed text and graphic time-line for the period, a computer terminal to provide detailed information, drawers full of accessible artifacts, material that can be handled, and a South Carolina locator map unit. In addition, changing exhibit areas will be located throughout the exhibition spaces. These will be used to emphasize and highlight varied aspects of the cultural history, natural history, science, and art within each major exhibit area. Seating areas will also be included in each major exhibit area. Seating areas will also be included in each major exhibit area. Some will be used as resting places; others will be used for demonstrations and talks to tour groups or school classes.

The exhibits will be located on three levels surrounding a central exhibit well, which will provide an overview of activities on all three floors. This open vertical space will create a dramatic area for viewing major objects placed or suspended within the exhibit well (see Figure No. 25 - Exhibit Sketch: Central Exhibit Well). The view through three floors within this area will give visitors an unusual slice through South Carolina history and an overview of the total range of their experiences within the exhibit areas. The pacing and variety of the exhibits will be enhanced by the exciting architectural spaces, the vistas, ramps, and escalators, and by the varied lighting levels, textures, and colors that will make up the interior ambiance.

VISITOR TOUR ROUTES AND OPTIONS WITHIN THE EXHIBITS

The layout of the exhibits on each floor will respond to the varied needs of the audience. The visitor with only a short time to spend at the Museum will be considered as well as the visitor who can stay several hours or all day. The special needs of school groups and handicapped visitors also will be taken into account.

SOME EXHIBIT HIGHLIGHTS

The following section describes some of the highlights that a Museum visitor might experience as he or she proceeds through the Exhibition Areas.

Natural Forces

Upon exiting from the natural forces experience tunnel (described under the Exhibit Experience on the previous page) the visitor encounters more detailed exhibits on geology, geography, weather, and hydrology. Many of these exhibits will allow visitors to participate in some activity.

Time and Changes

Impressive mastodon skeletons and the jaws of a giant shark welcome the visitor to an area in which he can see the remains of animals that once roamed South Carolina, such as the bison, camel, giant beaver, ground sloth, tapir, capybara, and mammoth. There are examples of extinct marine life, such as the giant white shark. "The Survivors" exhibit shows that certain life forms, including the shark, dragon fly, and starfish, have survived through countless eons of time in a relatively unchanged form.

In the "How Do We Know?" display, the visitor investigates the fossil record as it reveals more and more impressions of the past to the trained scientist. Fossilized remains are matched to graphic and three-dimensional reconstructions in a clear and educational manner. The Museum Commission's Fossil Recovery Program also is explained here.

Salt Marsh and Ocean Beach Habitats

Two habitat areas are represented in a large tableau. The first habitat is the ocean beach, where visitors can observe shoreline life, including birds and mollusks. On the beach there is a simulated tidal pool where small life forms (mollusks, starfish, sea urchins, etc.) can be examined with magnifying glasses. The second habitat is a salt marsh with its special vegetation, birds, and animals. The ecology of the salt marsh and the importance of preserving this delicate environment are major themes of this exhibit. Surrounding the tableau are other related exhibits for the visitors who wish to learn more about the plants, birds, animals, and marine life found in these two special environments.

Charles Town Port

Figure No. 26 - Exhibit Sketch: Charles Town Port is a large, two-story space filled with a replica of the port of Charles Town, circa 1730. The buildings and wharf area are a composite scene of typical buildings from the Prioleau Street area between Mr. Beale's Wharf and Mr. Blake's Wharf.

The visitor enters either by descending an exhibit-lined perimeter ramp behind the buildings or by stepping on board the poop deck of a reconstructed English trading vessel and proceeding down the ship's ladder and gangways. Sounds of the bustling port fill the air, and a gentle breeze slaps the slack sails. Two other vessels are unloading, a small inter-coastal sloop and an up-river piragua laden with barrels of tar and pitch and bales of skins. Life-like mannequins of indentured servants and African slaves await their new masters while a wealthy merchant and his wife inspect the latest household goods being unloaded from the Mother Country.

The lower floor of the wharf buildings are outfitted as shops, warehouses, and trading companies where the visitor may wander at will, learning of colonial trade and economics.

High and Low Roads to Revolution

In this area the visitor is challenged to take both the up-country and low-country approach to the American Revolution. Various problems facing the colonists are presented in engaging animated vignettes, and the visitor "votes" on the issues with an electronic dial. "The Die is Cast," a small computer station, is located under a huge Liberty Tree which penetrates the floor above.

A playful soft sculpture of King George hangs in effigy from a lower limb, while a similar tarred and feathered Tory slumps ignominiously at its base. The computer compares a visitor's vote and types a profile of him as a typical high and low country character, be it a farmer, trader, or merchant. Tory, patriot, and neutral totals register on a large illuminated tote board that displays today's visitor reactions.

Discovery Room

Nearby, a Discovery Room presents an opportunity for younger visitors to freely explore the various worlds of knowledge. With minimal supervision, they are invited to touch, swap, build, and compare natural and cultural history items that are on open display.

King Cotton - Civil War - Reconstruction

Later on, the visitor is invited to first try to pick the seeds from a boll of cotton and then to place it in an operating reproduction cotton gin. The results are immediate and a perfect introduction to King Cotton, an area of special exhibits devoted to exploring the interdependence of the agricultural economy, slave labor, and life. Animated talking mannequins of slaves, upcountry farmers, plantation operators, and others tell their own particular story of life in antebellum South Carolina.

We meet them later in the hot debates of the "Secession Theater" and finally in the Reconstruction Area where hopes and fears are compared with the stark realities of the era.

Natural History Area

Figure No. 27 - Exhibit Sketch: Natural History Area shows the Sand Hills and Piedmont habitats. These habitats are typical full-scale, recreated scenes of the plants, flowers, trees, and animal life of the distinct geological areas in the state. This particular area discusses ecotones and helps to tie together the relationships between the Piedmont and Coastal Plain at the important intersection of the Fall Line. An operating mill, water wheel, and dioramas of early mill workings (just out of the view in the sketch) help to show the importance of water power to the young state. The actual Saluda River fall line and the foundations of the Saluda mill, one of South Carolina's first cotton textile mills, are located on the Museum site. Natural history quizzes, exhibits, and touch displays help to show the complex interdependence of living things in these distinct parts of the state.

Early Transportation Technology

In the central exhibit well on the second level the visitor will be able to witness early transportation technology in the form of exhibits and reproductions of the Best Friend of Charleston, one of the earliest U.S. Steam locomotives; a full-scale canal boat and operable lock section, and a hugh reproduction of the Humley, an early Confederate submarine. Excited children will be able to actually get into the submarine replica and power the boat with hand cranks just like the Civil War sailors.

Hampton - Bourbonism - New Growth

Walk-in exhibits of a working up-country textile mill, one-room school house, and country store speak of life in the Hampton-Bourbon Era. Pitchfork Ben Tillman, speaking from a hefty stump, introduces the Agrarian Revolt section with its Darlington riots and land reforms. The development of modern government is discussed opposite a bright and brassy steam fire pumper pulled by two fire horses with flared nostrils.

A turn-of-the-century hotel interior, a tent meeting scene, and an Anderson touring car exhibit herald the New Growth Era with its attendant development of tourism and state highways.

New Agriculture Exhibit Well

Stepping from the dark Boll Weevil Theater, with its depression-era silent films, the visitor finds himself in the New Agriculture Exhibits, lit by exterior light from the glazed north wall (see Figure No. 24 - Exhibit Sketch: New Agriculture Exhibit Well). A Stearman biplane converted into an early crop duster skims over vintage steam and gas tractors. The first mechanized cotton picker symbolizes the turning point for rapidly modernizing South Carolina agriculture. Exhibits on tobacco and soybeans herald the break from the tyranny of the one-crop economy.

Equality, Ecology, and Expansion

The Mountain Cove Habitat ushers the visitor into the Modern Era after World War II. Engaging exhibits point out South Carolina's growth in the Sun Belt. Various displays from the industrial sector combine with cultural ones on the stories of civil rights, integration, and other events of the mid-20th century.

Solar power is dramatically portrayed by a tracking collector on the roof, which focuses a wide beam of sunlight down through the central well to a reflecting and defracting device. Visitors are invited to aim the beam at various working solar demonstrations.

"How Do I Fit In?"

The issues and opportunities in South Carolina today and tomorrow are presented in an audio-visual presentation in a "Decisions Theater." Computer terminals provide statistics and information and offer the visitor a chance to vote on future directions the state can take.

Changing Exhibit Gallery

A generous area on the First Level is used for constantly changing exhibits of timely natural history, cultural history, science and technological subjects.

Returning upstairs to the Third Level, the visitor has a choice of galleries with temporary art shows from other museums and the Museum's own collections.

Information Resource Center

The Information Resource Center at the end of the visitor's exhibit tour, offers maps, brochures, and other material on natural and cultural sites around South Carolina. The museums and libraries of the state are described, along with a listing of their resources and collections, so that the visitor can seek out these other institutions for further study and enrichment.

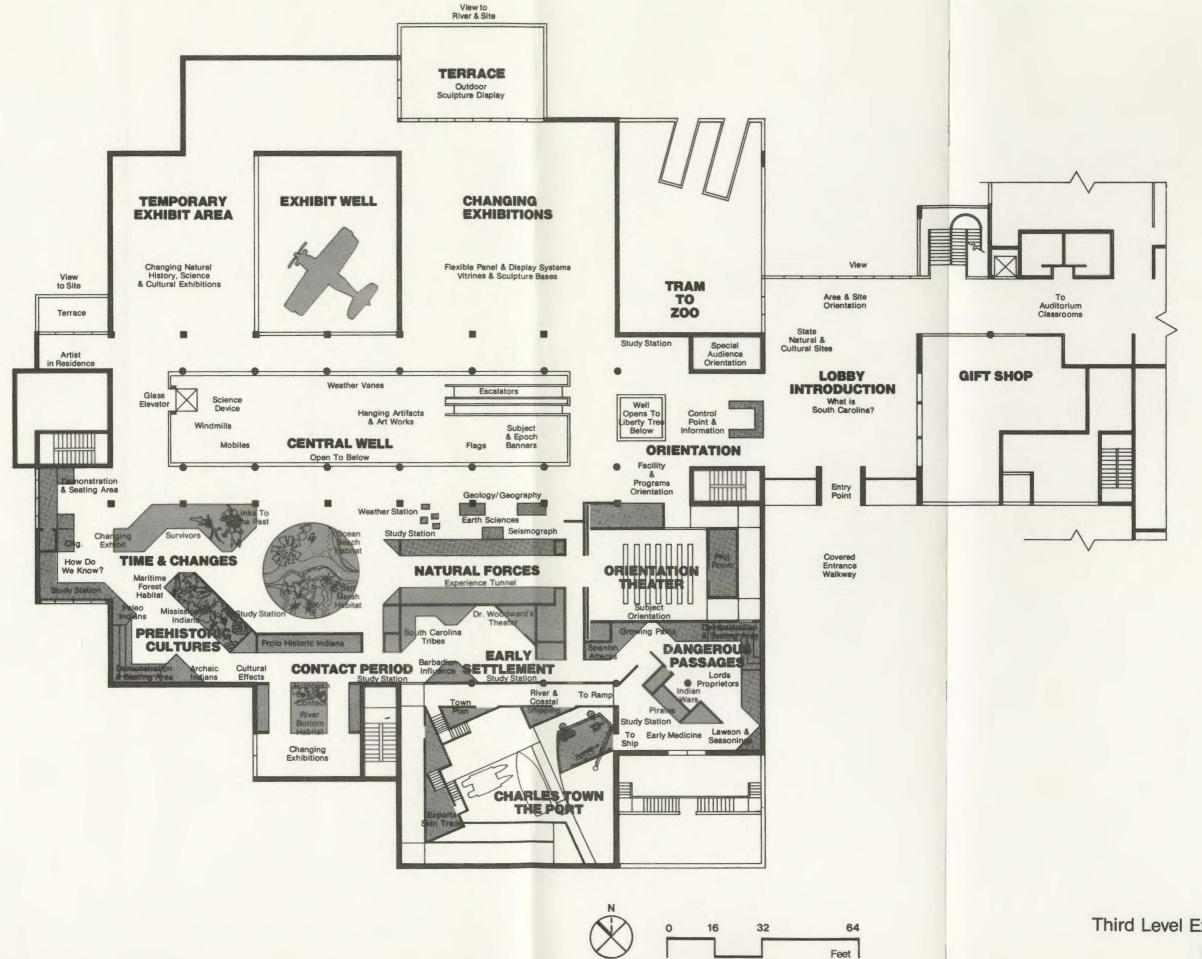
EXHIBIT PRESENTATION TECHNIQUES

The presentation within all of the exhibits will be based on a variety of dynamic techniques. The participation of the visitor in the learning process will be accented. The special needs of the handicapped visitor will be considered in all areas of the exhibits. The traditional use of text, photos, graphics, artifacts, dioramas, mannequins, and recreated full-scale scenes will be carefully mingled with newer exhibit techniques, including audio-visual devices, computer stations, discovery and demonstration areas, and quiz machines and games. The visitor's senses of sight, hearing, touch, and even smell will be utilized. The exhibits will first and foremost be educational; they will strive to pique the visitor's curiosity, to answer his questions, and to stimulate new questions. The exhibits will be moving and inspire a respect for the heritage and environment of South Carolina. They also will be just plain fun.

EXHIBITION PLANS

The following exhibition floor plans define the location and spacial relationships of the major and specific exhibits. The bold titles refer to major exhibits, while the lighter titles are specific exhibits which support the major theme. The shaded areas are the exhibits, unshaded are traffic areas. Traffic flows chronologically with various free-choice access areas and by-pass options.

Immediately following these exhibition floor plans are five sketches (Figures No. 24 through 27) showing some specific exhibition areas.



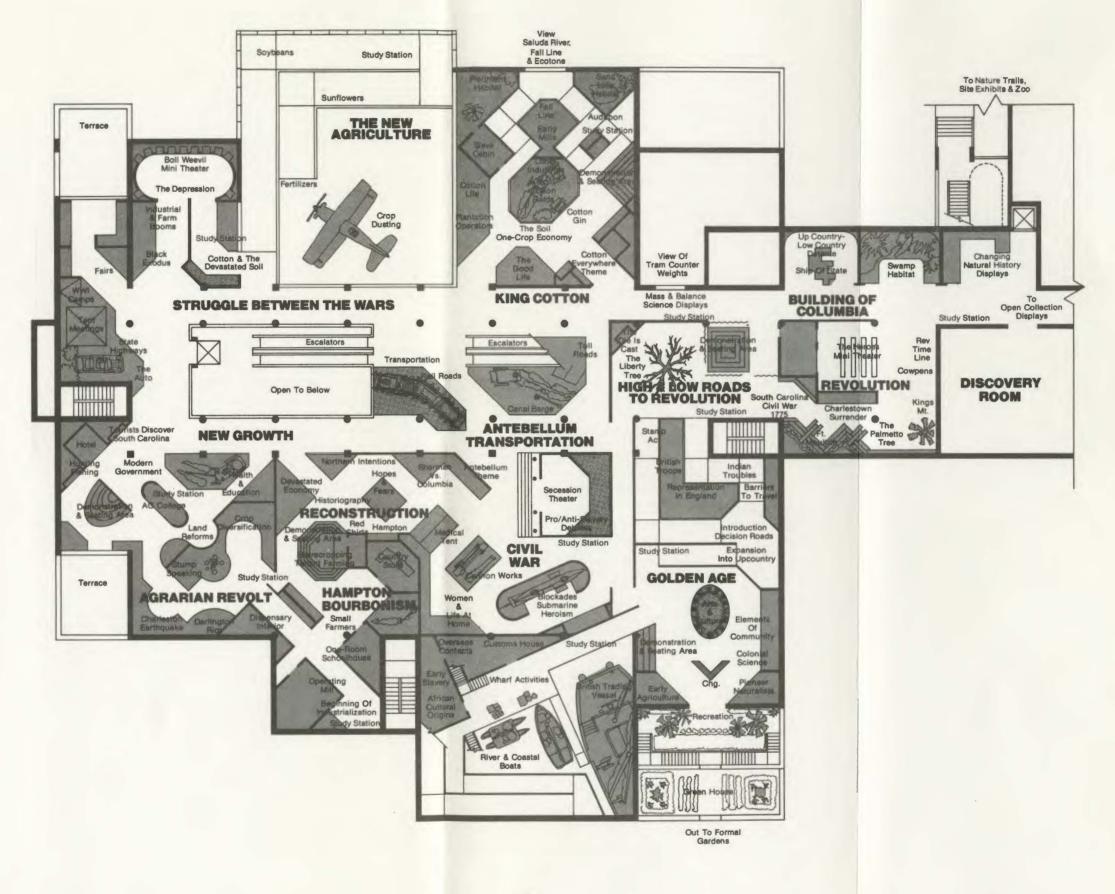
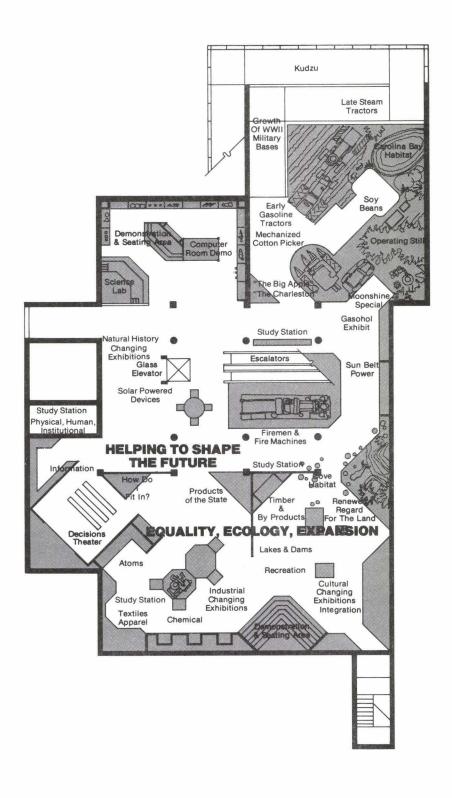
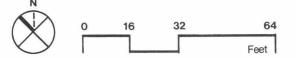


Figure No. 22





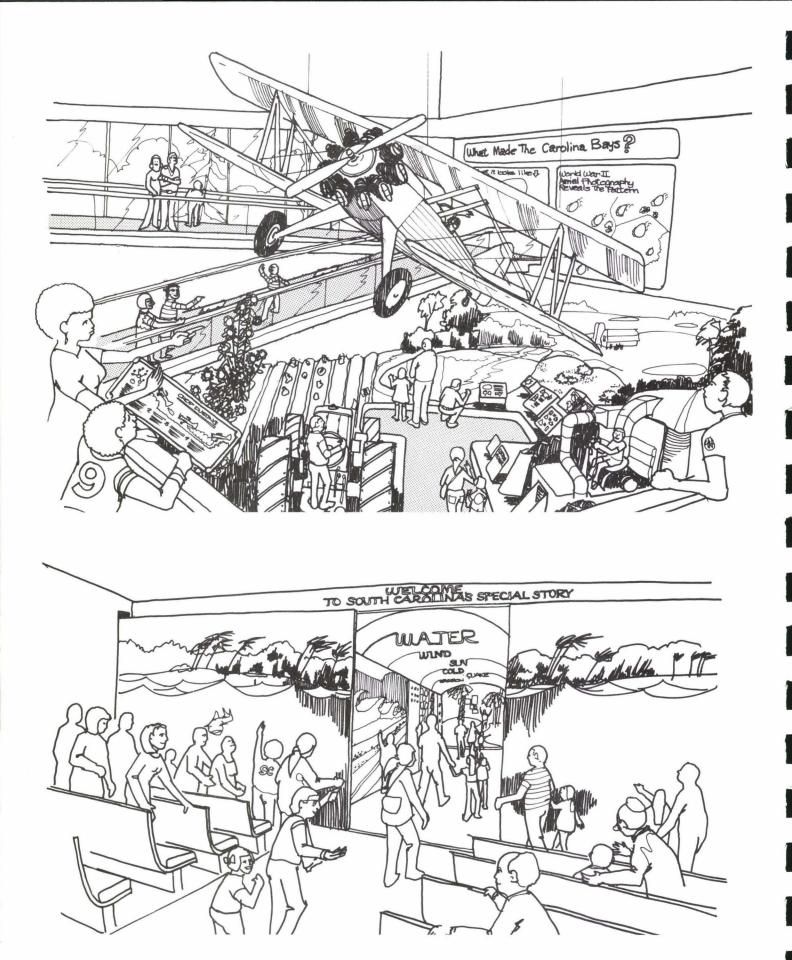


Exhibit Sketches: Upper - New Agriculture Area **Figure No. 24**

Lower - Orientation Theater

Audience Exits Through Split Screen



Exhibit Sketch: Central Exhibit Well



Exhibit Sketch: Charles Town Port Circa 1730

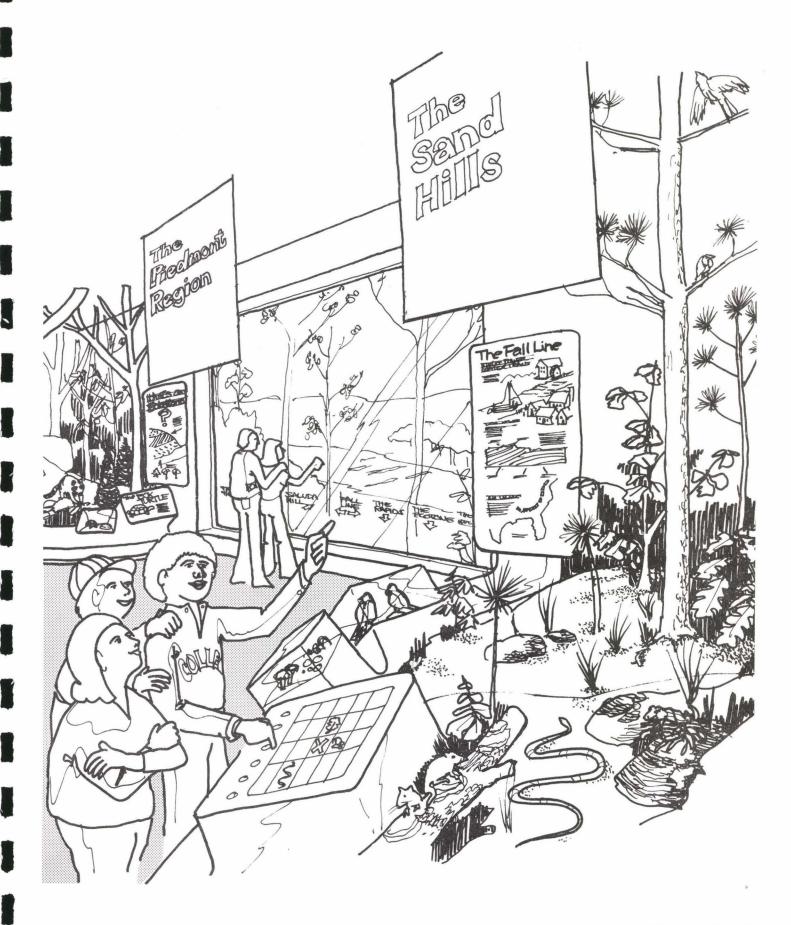


Figure No. 27
Exhibit Sketch: Natural History Area

EXHIBITION OUTLINE

The section which follows gives a detailed outline of the exhibits approximately in the order they will be encountered by the visitor, although bypass routes and free-choice areas will give the visitor some options to create his own order. The outline is meant to serve as a guide for the complete scripting in the final design phase. At that time, deletions and additions will again be made, emphasis will be defined, and detailed research and writing will be done.

The script is set up in four columns. The first column, Story Outline, contains the subject matter description. The second column, Discipline, designates the discipline(s) that are encompassed within the exhibit. ("H" = cultural history; "N" = natural history and agriculture; "S" = science and technology, and "A" = arts and culture.) The third column, Interpretive Techniques, lists the proposed exhibit techniques to interpret the subject matter. The fourth column, Graphics/Artifacts, lists the artifacts and graphics that are required to illustrate the subject matter.

EXHIBITION OUTLINE

toilets (amuse waiting visi-

tors).

GRAPHICS/ARTIFACTS DISCIPLINE STORY OUTLINE INTERPRETIVE TECHNIQUES ENTRANCE LOBBY Introduction to South Carolina (H,N,S,A). Welcome Bold banners, graphics. . What is South Carolina? Large map. Descriptive facts. State symbols. Some or all elements, fabric sculpture. Natural and cultural sites. . Area and site orientation. Random access slide or computer terminal (site orientation). Population counter. Museum Entry Point . Tickets - tram, museum. . Basic orientation to facility. Directory, bold floor plans. . Information. Entry/reception personnel. ORIENTATION AREA Orientation Lobby . Major orientation, museum and Large, light-animated floor and programs, "How to see the museum, route plans with rear-lit photos and graphics, visitor activated. special events". Multi-discipline exhibit approach. (H,N,S,A)Museum Roles and Programs. Exhibit layout and content. Current events and activities. Outdoor exhibits/trails. Museum store, restaurants,

Orientation Theater

. Dramatic overview of the story of South Carolina.

(H,N,S,A)

. Symbolic integration of the four disciplines.

> Cultural history. Natural history/agriculture. Science/technology.

Arts.

. Story of people, issues, events, ideas throughout times, stressing recurrent themes as well as changes.

. Early natural beginnings.

. Dramatic transition to exhibition.

Major film presentation.

INTERPRETIVE TECHNIQUES

Film, multi-screen slide, 3-D objects, figures, special effects, and audio.

Film, multi-screen slide, 3-D objects, figures, special effects, and audio.

Major film presentation.

Walk-thru split screen and dramatic

audio, sensory experience.

TIME AND CHANGES EXHIBIT AREA

Natural Forces

. Walk-thru natural forces.

Wave mechanics. Erosion. Plate tectonics. Weather.

Water cycle. Hurricanes.

Wave machine walls.

Dramatic ambient audio and experiential effects - water, wind, hot, cold, erosion, earthquake, time. Simple explanations and participation devices.

(N) (N)

(N)

(N)

(N)

(N)

TIME AND CHANGES EXHIBIT AREA (continued)

. Geology Five geophysical areas of South Carolina. Carolina. Commation of rocks: What is Large chunks of rocks and minerals. Photo blowups, animated film, or participation devices. Map of South Carolina's geography (to be Granite, amet	_
rock? mineral? fossil? (N) repeated throughout exhibits to locate limestone, ka Geology of museum site. (N) events and elements of each exhibit in lin, etc. regions of the state).	
The survivors - terrestrial and marine. (N) Beautiful photo blowups, illustrations, replicas - fe cast replicas. They die? Pleistocene extinctions. (N) Morses, mastowhale bones, shells, tree mains, turtle crabs, seacow	ferns, shark, camels, todons, , e re- les, ows,
How Do We Know?	life.
The work of geologists, paleon— Text and photos. Photos of rest and recovery site.	
Program. Video tape and slide show. Fossils, core program. (N,S)	
Ocean/beach habitat. Salt marsh habitat. Changing exhibit related to ocean beach habitat for: Seasonal changes, Story of specific species, Art related to ocean/beach. ON Full-scale habitat (walk over shallow habitat as an approach). Associated exhibits - ecological importance of salt marsh in South Carolina (one-fifth of Atlantic salt marsh on South Carolina coast.) Mollusks of South Carolina. Typical gallery space track lighting, movable panel system, cases, bases, etc.	

Tools, weapons.

(H,S)

(H,N)

(H,N)

(H)

(H)

(H)

(H)

(H,N)

(H,A)

(H,A)

(H,N)

(H)

PREHISTORIC CULTURES - "THE FIRST SANDLAPPERS"

Pleistocene Culture

. Early hunters.

Organization. Tools and weapons - scientific principle of leverage as ap-

plied to atlatl. Relation to animal migrations.

Diet.

(H) Scale diorama of hunt scene.

> Participation - flinging atlatl, hafting a point.

Text, graphics, remains.

INTERPRETIVE TECHNIQUES

To be located in relation to "Links to the Ancient Past" exhibit.

Archaic Culture

. Nomadic hunters and gatherers. Organization. Tools, weapons, dwellings,

camp life.

Scale diorama of nomadic camp. Participation - lacing hides to make clothing, grinding seeds in mortar

and pestle, flaking flint. Text, graphics, remains.

Tools, weapons, bone needles and pins, hides, rawhide, flint, hammerstone, mortar and pestle.

Mississippian, Woodlands Indians

. Pottery makers/early farmers. Organization.

> Tools, weapons, village life. Diet.

Pottery-making process. Burials.

Pipes, decorative items.

. Maritime forest habitat (shell midden).

Scale diorama of village life.

Participation - carving soapstone, grinding corn, drilling bones for

beads.

Scale diorama of burial.

Pipes, weapons, tools, site photos.

	GRAPHICS/ARTIFACTS
/	Photos of sites/digs Equipment.
-	Weapons, tools, decorative items.
5.	Remains, bones.
	Specimens, photos.

(N)

(N)

(N)

PREHISTORIC CULTURES - "THE FIRST SANDLAPPERS" (continued)

How Do We Know?

. Prehistoric archaeology.	(H,N,S)	Flexible exhibit area.	
The science, process, tools.		Text, photos.	
Outstanding South Carolina		Video tape - can be changing or slide/	Photos of sites/digs
archaeologists and sites.	(H,N,S)	sound.	Equipment.
. Physical anthropology of South		South Carolina map showing sites.	
Carolina Indians - who were	(H,N)	Locate exhibit for central access	
they, how did they get there?	(H,N)	from all exhibits on above cultures.	

CONTACT PERIOD EXHIBIT

Proto-Historic Indian Cultures

Changing ex. area for river

Specific flora and fauna.

Seasonal changes.

bottom.

	Village diorama (river bottom). Organization and ceremony. Burial.	(H)	Scale diorama - fall village scene. Artifacts with illustration of use and processes.	Weapons, tools, deco- rative items.
	Tools, weapons. Decorative items. Agriculture.	(H) (H,A) (H,N)	Bows and arrows - power and demonstration.	
٠	Tribal and language groups of South Carolina.	(H)	Mounts, illustrations, skulls, text. Map of location of tribes; South Carolina Indian names today; graphics.	Remains, bones.
	River bottom habitat. "What did they find?"	(H,N)	Full-scale habitat.	Specimens, photos.
	Indian agriculture - slash and burn (Indian modifica-		Small diorama of Indian agriculture.	
	tion of environment).	(H,N)	Touch exhibit of heaver fur, goals	
	Beaver - animal modifies en-	()	Touch exhibit of beaver fur; scale	
	vironment.	(N)	model of section of beaver dam.	

Dissolve view of creek before and

after beaver dam.

Flexible gallery space

(H,N,A)

CONTACT PERIOD EXHIBIT (continued)

tecture, attitudes, agriculture, crafts, slavery,

music, cooking.

European Contact

٠	Contact of Spanish, Blacks.	(H)	Full-scale tableau Introduction: banners and flags over section of Fort.	Contact items.
٠	Early explorers and attempted settlement. Allyon - 1521. DeSoto - 1539. Ribault - 1562. Menendez - 1566-1587. Pardo.	(H) (H) (H) (H) (H)	Illustration and text. Diorama of Fort San Felipe II and settlement.	Pardo stone?
	"How do we know?"			
•	Historic archaeology - Parris Island. Common techniques and evi- dence - ceramics, metal, etc.	(H,S)	Changing exhibits on parris Island excavation. Illustrations and text - contemporary journal accounts, sketches, maps. Artifacts with explanation of what they tell us about the culture.	Artifacts, equipment, etc., from Parris Island dig.
			Other archaeological site photos and	
	Enter the English.		artifacts.	
	Lords proprietors gallery.	(H)	Banner for each; text and illustration profile for each.	Pictures of proprietors; 1665 Charter
	The Barbadian/West Indian influence.	(H)	Slide show/audio.	reproduction.
	The people: why they left, who they were, what they brought: culture, archi-	\.\.\	Map showing relationship of South Carolina and Barbados.	Barbadian objects, photos, paintings of Barbados.

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STORY OUTLINE	DISCIPLINE	INTERPRETIVE TECHNIQUES	GRAPHICS/ARTIFACTS			
CONTACT PERIOD EXHIBIT (continued)						
. Enter the English, (continued) Use of tabby as building ma- terial. Changing artifact area, small.	(H,N) (H,A)	Entrance through door in West type facade. Flexible case or small gallery.	Architectural element.			
"Dr. Woodward, I presume?"	(H)	Talking head, Dr. Woodward, picking up at end of slide show above, tells of Indians and establishment of skin trade.				
THE COLONY MATURES - "DANGEROUS PAS" "Dangerous Passages"	THE COLONY MATURES - "DANGEROUS PASSAGES" "Dangerous Passages"					
. The pirates.	(H)	Computer terminals to for specific information on each topic; large light-animated figures of each category; small diorama on hanging of Stede Bonnet at Charles Town.	Pirate flags and banners.			
. Indians: Tuscarora, Yamassee						
Wars Contact effect on Indians (com-	(H)	Artifacts, illustrations, text.				
<pre>parison of cultural change) Proprietors/ oppression Spanish threat.</pre>	(H) (H) (H)	Journal accounts, sketches.	European trade goods.			
. The "seasonings": colonial medi- cine, malaria, yellow fever, smallpox, sickle-cell anemia,		Text and graphic panels - state of medical arts, models of mosquitoes to discuss life cycle.	Mosquito models. Early medical instru-			
medicinal herbs.	(H,N,S)	220000	ments and equipment.			
. Lawson's drawings and journals.	(H,N,A)	Specimens, drawings, text of animals Lawson described.				

(H,N,S,A)

THE COLONY MATURES - "DANGEROUS PASSAGES" (Continued)

"Dangerous Passages" (Continued)

. Changing exhibits for "Dangerous Passages" can be done in adjacent gallery as noted above.

Specific exhibit on white-tailed deer: White-tailed deer. economic importance to skin trade.

THE SOUTH CAROLINA COLONY

Charles Town Waterfront

. The Charles Town scene - 1730		Enter on ship deck - plank down to	Barrels, crates,
(shipping, commerce, trade)	(H)	full-scale walk-thru wharf.	piles of hides, etc.
		Building facades and interiors of full-scale boats.	
. Ships, sailing/import goods.	(H,N,S)	Special exhibit on turkey vulture and	Turkey vulture.
		black vulture (wharf scavengers).	Black vulture.
		Plank down, stairs up to ramp around wharf scene.	Early import items.
		Exhibits on ramp.	
Colonial labor Dlash and		Illustrated models of ships.	
. Colonial labor - Black and			
Indian slavery.	(H)	Model slave hold, hand and audio.	
Indentured European servants.	(H)		
. African culture and early Blacks.	(H)		
. The skin trade, tar, pitch.	(H,N)		Journal description.
Effect on Indians.	(H)		-
Effect on animal life.	(N)		
. The town.	(/		Period maps and graph-
Planning, architecture, so-			ics, journal descrip-
cial classes, lifestyle, re-	/ \		tions.
lation to Great Britain.	(H,A)		Sword of State repro-
			duction.

THE SOUTH CAROLINA COLONY (Continued) Charles Town Waterfront (Continued) . Huguenots. Settlement of Santee Valley. (H) . What a settler should bring with Text, graphics, artifacts, maps. him. (H) . Alien plants and animals brought Maps, diagrams, photos. Norway rat, cockroach, house mouse. into seaport. (N) . Changing exhibit area, such as: Early crafts. Small, flexible gallery. (A) Marine technology. (S) THE COLONY'S GOLDEN AGE Apex of Colonial Art and Culture . Music. A central theme/rest area. (A) Plush theater seats, chandelier. . Theater (H,A) . Literature (H, A) . Colonial artists - Jeremiah Theus. (A) Major presentation - random access . Architecture (Barbados and West audio, audio-visual. Indian influence). (A) . Charles Town Museum. (H,A) Small changing gallery. . Landscape gardening - aliens, importation of plants. (N,A)

INTERPRETIVE TECHNIQUES

DISCIPLINE

Elements of Community

STORY OUTLINE

. First printing press, South	
Carolina Gazette.	(H,S)
. Militia.	(H)
. Establishment of churches.	(H)
. War with French and Spanish.	(H)
. Black music, art, religion.	(H,A)

Newspaper mast. Legislative mace.

STORY OUTLINE	DISCIPLINE	INTERPRETIVE TECHNIQUES	GRAPHICS/ARTIFACTS
THE COLONY'S GOLDEN AGE (continued)			
Colonial Science			
 Demonstration of electricity and magnetism, 1760. Meteorological observations. 	(S) (N,S)	Reproduction of the demonstration - participation.	Early scientific instruments.
Colonial Recreation			
. Cock fighting, bear baiting Gander pulling, horse racing.	(H,N) (H,N)		Cock spurs.
Pioneer Naturalists			
 Catesby - snakes. Bartrum - Venus's flytrap. Hannah English Williams. Botanist, British Museum. Linnaeus - binomial nomenclature. 	(H,N) (H,N) (H,N) (H,N,S)	Biographies, journal quotes. Live Venus's flytraps. Live snake demonstration area. Changing art area. Exhibit of animals named after Catesby.	*
Early Experimental Agriculture			
. Alien plants and animals. Cattle. Old field succession (effect	(N)	Guessing game.	
on animals). . How soil types formed. . Indigo, rice culture. Eliza Lucas Pinckney. Process of cultivating and processing.	(N) (N) (N) (H,N)	Smell of indigo retting. Biography (agricultural experiments). Model of tidal rice mill. Greenhouse area; access to exterior	Pinckney portrait. Rice hook, fanner basket, wooden mortar
Importance of trade.	(H)	formal garden.	and pestle.
Slave labor. Bobolink, "the rice bird".	(H) (N)	Photos, text, specimen.	Bobolink.

STORY OUTLINE	DISCIPLINE	INTERPRETIVE TECHNIQUES	GRAPHICS/ARTIFACTS
THE COLONY'S GOLDEN AGE (continued)			
Swamp Habitat			
. Ecology of the swamp.	(N)	Full-scale habitat.	Swamp specimens.
Settlement of Up-Country			
 From Pennsylvania and Virginia, profiles and ethnic background Scotch-Irish, German. Religion, culture, attitude (Presbyterians, Quakers). Up-country farming. Subsistence. Wagon roads from Indian paths. Wagon road to Philadelphia. Relations with Indians. 	(H) (H,A) (H,N,S) (H) (H) (H) (H)	Graphics, maps, artifacts. Light-animated, large graphics. Journal quotes. Diorama of settler's cabin.	Pennsylvania- Kentucky rifle. Fraktur. Farm wagon
. Crafts.	(H,A)		
HIGH AND LOW ROADS TO REVOLUTION King George Forces the Issues			
. High road issues in Up-country. Indian problems. No say in government. Attitude, religion. Economics. Physical barrier to Low-country. Regulators. Ironworks, Cherokee Co.	(H) (H) (H) (H) (H) (H,N) (H) (H,S)	A fork in exhibit path symbolizes the divergent stories of the prelude to Revolution. Visitor takes ballot and proceeds to high road or low road and votes on issues. At end, answers are entered in computer for printout profile of who visitor may have resembled had he lived in the Revolutionary period.	

INTERPRETIVE TECHNIQUES STORY OUTLINE DISCIPLINE GRAPHICS/ARTIFACTS HIGH AND LOW ROADS TO REVOLUTION (continued) . The Liberty Tree. The Liberty Tree with banners and King (H) George effigy is central symbol, ringed by Up-country and Low-country issues. . Low road issues in the Low-Numbers will be used as overhead Stamped paper broadcountry. (H) Trade impairments. (H) graphic symbols. sides. Taxation. Diorama - tarring and feathering. British military Presence of British rule Stumps under tree to sit and rest. items. (troops). Tea chest. (H) Representation. (H) Debates, boycotts. (H) . The die is cast - what side are Computer terminal tallies votes and you on? assigns visitor's fate. SOUTH CAROLINA - BATTLEGROUND FOR A NEW NATION

The Battle Road

. Fort Moultrie.

flag.

Palmetto trees.

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The battlement.	(H)	Time marker banners overhead point up	
		major events, battles.	
		Visitor enters exhibit along palmetto	
		stockade: Audio and flashing lights	
		simulate battle scene.	
Story of the Battle.	(H)	Flags overhead.	Fort Moultrie flag.
Symbolism of State seal and			

(H)

(H)

(H,N)

Time line - text and pictures.

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STORY OUTLINE	DISCIPLINE	INTERPRETIVE TECHNIQUES	GRAPHICS/ARTIFACTS
HIGH AND LOW ROADS TO REVOLUTION	(continued)		
. Surrender of Charleston. The surrender story. British reign of terror.	(H) (H)	A little theater. Film or slide show on Revolution in South Carolina; battle effects in theater during presentation.	Many graphics of South Carolina battles and heroes.
. Battle of Kings Mountain. Loyalists vs. patriots. The riflemen. Importance of Pennsylvania- Kentucky rifle. Battle of Cowpens. Turning point of war.	(H) (H) (H) (H,S) (H) (H)		
. Heroes. Sgt. William Jasper, Henry Laurens, Francis Marion, Thomas Sumter, Rutledge, Middleton, T. Heyward, Jr.	(H)	Gallery of heroes - art and arti- facts, text - Sgt. William Jasper, Henry Laurens, Francis Marion, Thomas Sumpter, Rutledge, Middleton, T. Heyward, Jr. Changing exhibit area in gallery.	Portraits, battle paintings, artifacts, especially personal items.
A NEW STATE, A NEW CAPITOL Union of Up- and Low-Country			
Forms the New State			
 Establishment of the nation and state. The fall line. Moving the capitol - Columbia. Early governors and legislators Post-war economy. Architects/planners. Up-country's new political 	(H) (H)	Wall mural of the construction of capitol in Columbia. Graphics and text. Mostly graphics, some text.	
strength.	(H)		

KING COTTON

Cotton Theme Area

 Cotton is everywhere, affects all (1801-1811 South Carolina produced half of U.S. cotton). Cotton Cultivation. Varieties of cotton. Soil, seed, field preparation. Planting. Cultivation. 	(H,N) (N) (N) (N) (N) (N)	Infinity cotton field - walk- through series of quotes. Graphics, text, artifacts. Cotton field wall mural.	
Harvest. Labor intensive aspects. Equipment (primitive technology.) One-crop System. Effect of one crop agriculture on soil, insects, etc.	(N) (H,N) (H,N,S)	Full-scale tableau-picking. Cotton bag demonstration area.	Cotton sacks, hoes.
. The cotton gin - 1793. Eli Whitney - South Carolina bought rights in 1801. The cotton boll and seeds. Cotton gin technology - various types. The processing of cotton.	(H,S) (H) (N) (N,S) (N,S)	Graphics, text. Graphics, text, actual bolls. Graphics, text, artifacts. Full-scale working gin demonstration.	Cotton gins, cotton scales. Load of cotton.
. Naturalists of the era. Dr. John Edwards Holbrook - reptiles and amphibians.	(H,N)	Full-scale wagon with cotton. Cotton scales demonstration. Journals, sketches, text. Specimens.	Mule wagon. Four mule hides/ taxidermy. Specimens. Drawings.

INTERPRETIVE TECHNIQUES

(continued) Cotton Theme Area

Thomas Cooper - fossils			
and geology.	(H,N)		
Andre Michaux.	(H,N)		
. Spinning and weaving.	(H,N,S,A)		Fiber.
Plantation crafts.	(H,N,A)	Crafts display.	
Process of spinning and		Spinning demonstration.	Crafts of the
equipment.	(H,N,S,A)		plantation.
Looms and process		Weaving demonstration.	Spinning wheel.
of weaving.	(H,N,S,A)	-	Loom - 4 harness.
Slave artisans.	(H,A)	Graphics and text.	
. Plantation life.	(H,A)	Graphics and text.	Original portraits,
Life of wealthy white		Original art from period.	landscapes of genteel
minority, education/			people and plantations
philosophy/traditions.	(H)		of South Carolina.
. Small cotton farmers.	(H)	Graphics and text.	
. Black majority.	(H)		
The slave economy.	(H)	Graphics, text, maps.	
Politics of slavery laws,		Graphics, text, maps, and	

artifacts.

Daily life of plantation slaves. Family, religion, traditions. Work, recreation, music. Living conditions - seasonal cycle of work and life, diet, crafts.

Alien plants of African origin. (N)

(H)

(H)

(H)

(H)

Sales, tags, ownership (black gang drivers).

restrictions.

Graphics, text, audio-music. (H, A) Quotes. Dugout canoe technology. Touch exhibit of coarse cloth. (H,N,A)

Full-scale slave cabin.

Slave tags.

Dugout canoe.

Coarse cloth.

Furniture and acces-

sories for slave cabin.

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STORY OUTLINE	DISCIPLINE	INTERPRETIVE TECHNIQUES	GRAPHICS/ARTIFACTS
KING COTTON (continued) The Black Majority - threats and fears.	(H)	Maps, graphics, text/quotes.	
The free Blacks. Life, work, restrictions. Potters, coopers, etc. Plantation life speakers. Slave, overseer, owner, woman, northern visitor, free Black. Changing exhibit gallery - "King Cotton".	(H) (H,A) (H) (H) (H,N,S,A)	Graphics and text. Artifacts - pottery, etc. Mannequins, audio tapes. Speakers tell of life on plantation via hearphones. Flexible small gallery area.	Free-Black products. Costumes, accessories.
KING COTTON ERA: THE UP-COUNTRY AND INDUSTRY Audubon			
. Life, art, travels in South Carolina The birds of South Carolina.	(H,N,A) (N)	Large-scale taxonomic bird exhibit. Audio-visual on bird biology, graphics, text, random access audio-visual.	Bird specimens. Audubon prints.
The Sand Hills . What are the Sand Hills? . Flora and fauna of Sand Hills.	(N)	Full-scale habitat. Text, graphics, map.	Various specimens.
The Piedmont Flora and fauna, geology of Piedmont.	(N)	Text, graphics, map.	Various specimens.

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STORY OUTLINE	DISCIPLINE	INTERPRETIVE TECHNIQUES	GRAPHICS/ARTIFACTS
Water Power			
. The fall line/geology.	(N)	Text, graphics, map.	
. Water resources - river			
systems.	(N)		
. Early mills.	(S)	Text, graphics, map.	Full-scale water
Technology of water power.	(N,S)	Diagrams.	wheel.
Rivers.	(N,S)	Models of different types	
Tides - 1793 Jonathan		of water wheels.	
Lucas using tide power.	(N,S)		
. Saluda Mill (on-site)		Text, graphics, diagrams.	Saluda Mill logo,
(use as example of early		Logo, drawings, advertising	advertisements, items
cotton mill.	(N,S)	from Saluda Mill.	made, similar equipment,
			drawings.
. Site interpretation.	(N,S)	Diorama or scale-model of mill.	
. The process of cotton		Operating water wheel or scale	
milling.	(S)	mill.	
Changing Gallery			
. Used to further interpret Sand		Elevible milleur mans	
Hills and Piedmont habitats and		Flexible gallery space. View to site, rest area within	
	(37. (3)		
water power/mills exhibit.	(N,S)	or adjacent deck.	
(Possibly transportation exhibit)	150		
Seasonal aspects of habitats.	(N)		
. Exhibits on specific flora/fauna.	(N)		
. Artwork portraying Piedmont, Sand			
Hills landscape, flora, fauna,	/17 N G - 1		
mills.	(H,N,S,A)		
. Items produced, used in, adver-	(** 0 *)		
tising, etc. from early mills.	(H,S,A)		
. Story of spec.mill, owners, etc.	(H)		

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STORY OUTLINE	DISCIPLINE	INTERPRETIVE TECHNIQUES	GRAPHICS/ARTIFACTS
Other Industries			
. "Gold Rush" - Haile and Dorn mines.	(H,S)	Graphics, text, artifacts. Stress process.	Gold samples.
 Rope - Columbia, Charleston. The processes of smelting, gold mining, "Ropewalks". 	(H,S)		Rope-making equipment.
KING COTTON - TRANSPORTATION			
The Roads			
. Horse-drawn transportation Vehicle development.	(H,S) (H,S)	Graphics, text, maps. Graphics, text, maps.	Carriages.
. Road building Toll roads.	(H,S) (H)	Diorama. Graphics, text, maps.	Horse scoop. Road markers.
The State Road (site interpretation) 1829. Buncombe Road.	(H,S)	Full-size tableaux. (Relate to section of road on site.)	Road maps.
Ferries and bridges.Paintings of stage travel	(H,S)	road on site.)	
in America (South Carolina)	(H,A)		
The Canals			
. The Santee Canal. The building of, the dis-	(H,S)	Full-scale canal boat, canal lock.	Canal boat or repro- duction.
covery of elephant teeth.	(H,S)	Text, graphics, maps.	ddcton.
. The workings of the canal and locks.	(H,S)	Working models - demonstration, diagrams.	
. Canal boats/horse power Irish immigration - construc-	(H,N,S)	Models, graphics, diagrams.	
tion labor.	(H)		

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STORY OUTLINE	DISCIPLINE	INTERPRETIVE TECHNIQUES	GRAPHICS/ARTIFACTS
The Railroads 1830+			
. "The Best Friend of Charleston". 1833 - first loco- motive built in America for regular railroad service - longest rail- road in the world at	(H,S)	Full-scale reproduction and tableau. Text, graphics, maps.	Reconstructed "Best Friend". Patent documents.
that time - Charleston to Hamburg, South Caro- lina - 136 miles.	(H,S)	Exhibit on Hamburg, South Carolina area, working model of steam engine, text, graphics, diagrams on steam power.	Small working model of steam engine.
. Succeeded by the Phoenix. Technology of steam power.	(H,S)		
. Railroad development in South Carolina. Lines, companies, routes, schedules.	(H,S)	South Carolina Railroad - photos, artifacts, text.	Small, early railroad items.
. Importance in uniting Up- and Low-country. 1842 - railroad service be- tween Charleston and Columbia	(H)	"Before and after" comparisons, railroad's impact - graphics, text. Maps (possible random-access audio-visual).	
began - "Robert Y. Hayne". Transporation time-line wall.	(H)	Text, graphics, small artifacts.	Schedules, tickets, advertisements, small items, art featuring roads, canals and railroads.

STORY OUTLINE	DISCIPLINE	INTERPRETIVE TECHNIQUES	GRAPHICS/ARTIFACTS
SECESSION			
Secession Theater			
 Nullification - John C. Calhoun. Mexican War. The question of slavery. The Southern view of the Union (philosophy). The failing Southern economy - cotton falters. 	(H) (H) (H) (H)	Antebellum theme area. Theater will be set up with a facade of white columns in keeping with the plantation theme. The audio-visual presentation will center around John C. Calhoun.	White columns. Calhoun items.
. Antebellum theme area. Civil War time-line wall.	(H)	Major wall graphic depicting a debate (Brooks vs. Summer). Text, graphics, small artifacts.	Small Civil War items and broadsides, etc.
. The naval effort. Confederate Submarines - David, Hunley.	(H,S)	A full-scale reproduction of Hunley will be shown submerged from approach side. Visitors will circle to other side, which will be cut away. Visitors can en- ter the submarine and pedal it (motive power). Some species of harbor marine life can also be shown. Mechanics of the sub- marine will be explained. Text, graphics, artifacts.	<pre>Hunley reproduction, marine specimens.</pre>
. The Blockade, battles at Charleston, Fort Sumter.	(H)		Items related to blockade, battles.

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STORY OUTLINE	DISCIPLINE	INTERPRETIVE TECHNIQUES	GRAPHICS/ARTIFACTS
THE WAR The War in South Carolina Confederate arms - South Carolina armorers. Life at home during the war. "Making do" - substitutes. Women and family left to defend.	(H,S) (H,N) (H)	Text, graphics, artifacts. Text, graphics, artifacts. Stress natural history in substitutes.	Cannon, cannon rifler, South Carolina arms, specs, advertisements. Substitute items.
<pre>"Heroic medicine". Hardships, medical treat- ment. Medical science, nursing, medical herbs, etc. Sherman's March, burning of Columbia. Sherman biography. Site interpretation - camp, bridge burning.</pre>	(H,N,S) (H,S) (H,S) (H) (H) (H)	<pre>Full-scale tableau-medical tent. Text, graphics. Text, graphics, maps, photos. Personal accounts, audio. Large mural of Columbia in flames.</pre>	Civil War medical items. Personal troop items.
RECONSTRUCTION Reconstruction Northern intentions, Southern leaders. Plans of reconstruction, riots, duels. Black leaders; students - Naval Academy, University of South Carolina.	(H) (H)	Text, graphics, artifacts.	Carpet bag.

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STORY OUTLINE	DISCIPLINE	INTERPRETIVE TECHNIQUES	GRAPHICS/ARTIFACTS
Agriculture/Tenant Farmer			
Postwar agriculture practices and equipment.The share cropping system.	(H,N,S) (H,N)	Text, graphics, larger-scale artifacts.	Hoe, plow, mule. Photos.
. Life of poor tenant farmer.	(H)	Scale diorama of share-cropper's house, barn, crop.	Original art of rural life.
The Country Store			
Crop lien credit - the new "slavery."Material culture of rural life - what people wore, ate,	(H)	Full-scale country store facade and interior. Audio presentation.	Store fixtures, lighting items, inventory, tins, barrels, etc.
etc. . Patent medicines.	(H) (H,S)		
Changing nature, science, art			
. Small gallery area to house a variety of changing exhibits on art, science, natural his-		Flexible gallery lighting and fixtures.	
tory of this period.	(H,N,S,A)		
Demonstration Area	(H,N,S,A)	Carpeted seating tiers, stage, storage.	
One Room School			
 Education - public; White, Black. 	(H)	Full-scale school house - two facades and interiors.	School structure. Furnishings, stove, textbooks, slates.

The Agricultural and Natural Environment			
 Soil, one crop economy - effect on natural environ- ment. Phosphates industry 1867+. Charleston earthquake 1886 - plate tectonics. 	(N) (N,S) (N,S)	Text, graphics, artifacts.	
INDUSTRIALIZATION			
The Textile Mill in the Up-Country		Full-scale mill room equipment.	Mill interior equipment.
Raw materials, the process.Relation to water power.Labor force, labor problems.Industrial economy.Management (influx from north).	(N,S) (N,S) (H,S) (H,S) (H)	Mannequin workers, audio. Text, graphics, artifacts.	Workers clothing. Textile graphics, advertisements, logo, etc.
Dispensary 1892-1907			
The South Carolina liquor laws.The Darlington Riots, 1894.	(H)	<pre>Full-scale dispensary facade and interior. Text, graphics, artifacts.</pre>	Dispensary bottles, Dispensary advertisement. Dispensary fixtures and interiors.
AGRARIAN REFORM			
Pitchfork Ben Tillman			
. Stump speaking politics 1885+	(H)	Mannequins, audio.	Election banners

INTERPRETIVE TECHNIQUES

GRAPHICS/ARTIFACTS

and memorabilia.

DISCIPLINE

STORY OUTLINE

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STORY OUTLINE	DISCIPLINE	INTERPRETIVE TECHNIQUES	GRAPHICS/ARTIFACTS
AGRARIAN REFORM (continued)			
. The plight of the rural farmer.	(H,N,S)	Text, graphics, artifacts.	
. Ben Tillman biography - U.S. Senator 1895-1918.	(H)		
Agricultural Colleges and Agricultural Reform			
. New agricultural techniques. Hybrids, selective breeding. Crop rotation.	(H,N,S) (N,S) (N,S)	Text, graphics, diagram, photo.	
. Clemson College 1893 Agricultural societies Land reforms.	(H,N) (H) (H,N)	Text, graphics, artifacts. Large photo mural backdrop.	Clemson, agricultural societies items.
Extinctions			
. Carolina parakeet Passenger pigeon.	(N)	Text, graphics, specimens.	Parakeet, passenger pigeon specimens.
State Fair			
• The color and tradition of South Carolina's State Fair.	(H,A)	Text, graphics, photos, artifacts.	Banners, trophies, ribbons, programs.
 Livestock, agricultural products. 	(H,N)	Scale diorama of fair scene.	Original art - fairs. Livestock.

AGRARIAN REFORM (continued)			
The Black Plight			
. Jim Crow laws 1917 - NAACP formed. The black-white struggle Segregation laws and customs Subsequent reform Black leaders in struggle.	(H) (H) (H) (H)	Text, graphics, photos. Artifacts.	Items relating to segregation.
PUBLIC REFORM			
Health and Education Reform			
 1907 - Act providing high schools. 1915 - State Board of Charities and Corrections (mod. social-welfare legislation). 1924 - "6'0'1" school law 	(H)	Text, graphics, photos.	Yearbooks, sports, team photos, etc. Graduation items.
passed. Parasitology and nutrition.	(H) (H,N,S)		
. Pellagra, malaria, hookworm.	(H,N,S)	Text, graphics, diagrams, photos.	
SOUTH CAROLINA'S NEW GROWTH			
Modern Government			
 Growth of public services. Municipal government - police, fire departments. 	(H) (H,S)	Text, graphics, artifacts. Full-scale steam fire engine as dominant image.	Steam fire engine.

Technology of steam pumper.

INTERPRETIVE TECHNIQUES

DISCIPLINE

STORY OUTLINE

GRAPHICS/ARTIFACTS

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STORY OUTLINE	DISCIPLINE	INTERPRETIVE TECHNIQUES	GRAPHICS/ARTIFACTS
SOUTH CAROLINA'S NEW GROWTH (contin	nued)		
. State song Demonstration area -	(H)	Audio of state song. Demonstration area.	State flags.
carpeted, seating tiers, stage, and storage.	(H,N,S,A)		
Tourism/Transportation			
. The Anderson Auto - 1916-25.	(H,S)	Photo mural - full scale tableau with car.	Anderson information, specifications, logo, car tools, props,
. Vacationing, hunting, fishing in South Carolina.	(H,N)	Text, graphics, artifacts.	suitcases, trunks.
Trend set by President Grover Cleveland.	(H)	Text, photos, art-sporting.	
Wintering in South Carolina by wealthy. Game animals.	(H) (H,N)	Photos of vacation architecture.	
Wildlife management. . Hotels Architecture, decorative	(N)	Full-scale hotel room interior. Photo mural of hotel facade.	Furnishings, props.
arts.	(H,A)	Hotel public interiors.	Piano.
Tent meetings, camps.Religion, music, traditions.	(H) (H,A)	Full-scale tents, tableau. Audio-music and preaching.	Camping gear. Hymnals.
STRUGGLE BETWEEN THE WARS			
World War I			
 National Guard camps - Greenville, Spartanburg. Charleston Navy Yard. U.S. Army-Camp Jackson, Columbia. 	(H) (H) (H)	Text, graphics, artifacts. Biographies of military leaders in South Carolina.	Military items. Photos of camp life.

GRAPH	TCS/	ARTIF	ACTS

INTERPRETIVE TECHNIQUES DISCIPLINE

STORY OUTLINE

(continued) STRUGGLE BETWEEN WARS

Life in South Carolina Early Twentieth Century

. Fashions, the "flapper".

New labor laws.	(H)		
Literature and art.	(H,A)	Full-scale tableau.	
1923 - "The Charleston", "The		Audio- "Charleston" music.	Items related to
Big Apple" (dances).	(H,A)		"flapper" era.
Women - change of values,		Biographies of women.	Costumes, jewelry.
life styles.	(H)		

Black Exodus

. Black population reduction.	(H)	Text, graphics, artifacts.	
Disease, poverty.	(H,N,S)		
Emigration to North and			
Midwest.	(H,N)		
. Black leaders.	(H)	Biographies of Black leaders.	Items related to Black culture.

Agricultural Depression

1919 - Boll weevil - Sea Island		Text,	graphics,	artifacts.
cotton.	(H,N)			
1921 - Agricultural depression				
began.	(H,N)			
Soil depletion - conservation.	(N)			

(H,A)

Moonshine

. The still		Working still.
Technology (gasohol).	(H,S)	Diagrams, still technology.
Prohibition, running moon-		Scale model cutaway of moonshine
shine.	(H)	running automobile.
1935 - liquor laws after		
Prohibition.	(H)	

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STORY OUTLINE	DISCIPLINE	INTERPRETIVE TECHNIQUES	GRAPHICS/ARTIFACTS
THE DEPRESSION OF THE THIRTIES			
Agriculture Failure			
. The Boll Weevil life cycle of, effects of Insects and Man Alien plants - Kudzu Pesticides Chemical industry Boll Weevil Theater.	(N) (H,N) (H,N) (N) (N,S) (S) (H,N,S)	Many "postage stamp" theaters in this mini-theater gallery portray the struggle of life in town and on the farm - original film, slides, sound.	Original film footage of depression. Oral history of depression era.
Economic Failure			
 Life in the Depression. Public works. Roosevelt - South Carolina Democratic party. Health problems reduced. Changing Exhibit Area. 	(H) (H,S) (H) (H,S) (H,N,S,A)	Random access. Slide show, oral history.	Depression photos.
Life in the 30's			
Public safety and health. Hurricanes 1940. Tornadoes 1938. 1934 - Textile workers strike. 1932 - Public Welfare Act. Cotton Ed Smith election 1938. Recreation. Education.	(H,N,S) (N,S) (N,S) (H) (H) (H) (H,A) (H)	Text, photos, artifacts. Text, photos, artifacts.	

	Carolina Bay nabicat	(N)	Tall boats has to act
	Post War Development		
202	 Expansion - new industry. Agricultural diversi- fication. New agricultural equipment. 	(H,S) (H,N,S) (N,S)	Text, graphics in the form of a timeline along a ramped area descending by various agriculture equipment of twentieth century, crop duster plane.

(H)

(H)

(H)

(H)

(H)

(H, A)

DISCIPLINE

(H,S)

(H,S)

(H,A)

(H)

(H)

INTERPRETIVE TECHNIQUES

Text, graphics, artifacts.

Full-scale habitat.

Timeline on ramp.

Text, graphics, small artifacts.

Audio and photos - Porgy and Bess.

STORY OUTLINE

WORLD WAR II

World War II

. Equality

Board.

. Rising prices of agri-

. War-related industry/prosperity.

The civil rights movement.

Mary M. Bethune.

1960's - "Sit-ins".

1935 - Porgy and Bess.

Black, civil rights leaders -

1951 - upgrade Black schools.

1954 - desegregation - Brown vs.

cultural products.

. Women in work force.

Politics.

Carolina Bay Habitat

Fashion.

Items, advertisements of industry and agri-

GRAPHICS/ARTIFACTS

culture.

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18	STORY OUTLINE	DISCIPLINE	INTERPRETIVE TECHNIQUES	GRAPHICS/ARTIFACTS
	ENVIRONMENT			
	Mountain Cove Habitat	(N)	Full-scale habitat.	Mountain specimens.
	. Mountain Ecology Changing gallery related to	(N)		
	Mountain Cove.	(H,N,S,A)		
	Forest Management			
	. Timber and by-products. Process. Economy.	(H,N,S) (S) (H)	Full-scale trees clustered as walk-through area to "infinity" box. Audio-visual presentation portraying the growth, harvest, and planting of trees.	
	Renewed Regard for the Land	(N)		
	Lakes and dams-hydroelectric. power.Recreation.Art and photography on landscapes."The Sun Belt."	(S) (H,A) (N,A) (H)	Text, color photos, diagrams, technical information on dams, etc.	
	SOUTH CAROLINA, TODAY AND TOMORROW How Do I Fit In? A presentation of the issues and opportunities of South Carolina today and the promise of the	(H,N,S,A)	A small audio-visual theater presents a show on South Carolina today and tomorrow.	
	future. The computer terminals provide statistics and information and offer the visitor a chance to vote on future directions the State can take.			

SOUTH CAROLINA, TODAY AND TOMORROW

Information Resource Center

(H,N,S,A)

. Information, maps, brochures on cultural and natural sites and events in South Carolina; tourism information also. Other resources available at the Museum and the Zoo will also be stressed.

Implementation

Introduction

The preceding seven sections of this Report document the long range Master Plan for the South Carolina State Museum. This section outlines the steps necessary to implement the recommendations of the Master Plan.

The observations and conclusions included in this report have been arrived at through careful study and investigation. The results of this investigation are documented in Section 7 - Physical Master Plan, where it is recommended that a building of 190,000 sq.ft. containing adequate facilities to carry out the Museum's Education, Exhibition, and other programs be constructed. It also is recommended that approximately one-half of the exhibits be constructed at the same time as the building, with the remainder of the exhibits being completed over the next decade. Finally, it is recommended that an aerial tramway be constructed to link the State Museum with the Riverbanks Zoo.

Although it is clearly in the long range interest of the Museum to proceed with the Master Plan as shown in the report and as described above, sometimes short-term considerations override long range interests. Therefore, in this section two potential phasing options are discussed. Phasing Option I involves leaving the portion of the building that would not immediately be occupied by exhibits as unfinished space, that is, the mechanical and electrical systems and interior finishes would not be installed. However, such an approach means that it would be necessary to finish these areas before the orderly implementation of additional parts of the Exhibition Program can continue. Phasing Option II includes, in addition to the above, deferring the construction of the aerial tramway. Capital Budgets for each of these phasing options are included in this section.

One of the critical aspects of the implementation of the State Museum is the design and construction of the exhibits. As a result of the extent of time necessary to research, plan, design, construct, and install exhibits, only one-half of the total Exhibition Program would be ready by 1984 when the building opens to the public. The remaining exhibits would have to be constructed on a year-to-year basis until completed. Therefore, exhibition areas that will not be used for the initial phase of exhibits must be available for on-going exhibit installation. During the course of the planning work, phasing the construction of a portion of the building was considered. In the opinion of the architect/planners, however, this particular type of phasing was not considered to be feasible, since it would prevent the orderly implementation of the Exhibition Program as described above. In addition, the phased construction of the Museum's support areas is not feasibile because the support spaces outlined in the Facility Program represent what the Museum must have in order to carry out its programs.

The physical facilities, including the exhibits, would be of little value to the people of South Carolina without an adequate staff to plan the programs and make them available to the public. For this reason, a Recommended Staff Hiring Schedule to supplement the existing staff also is included in this section.

The Work-Time Schedule found at the end of this section graphically illustrates the major steps that must be taken, and the duration of time necessary to execute each step, from the completion of the Master Plan Report, through subsequent stages of the design process, the actual construction of the building, exhibit design and construction, and all of the other steps that must be accomplished in order to create a new State Museum for South Carolina.

Phasing Option I

If phased construction is essential in order to reduce the initial capital cost, it is recommended that the total building be constructed and that areas not to be used immediately for exhibition be left unfinished. These unfinished areas would have no mechanical and electrical service or interior finishes, thereby reducing their initial cost by approximately one-half. This would save \$2,850,000 of the initial project cost. A significant disadvantage of this phasing option is that although it would save money initially, the finishing and completion of these areas at a future date would be more expensive and would make the implementation of the on-going Exhibition Program more difficult to accomplish.

As already stated in the Introduction to this section, all of the exhibits will not be completed when the building is finished. It is envisioned that implementation of the total Exhibition Master Plan will be a continuous process for many years after the Museum opens, involving an on-going research, planning, design, and installation effort.

If the building is completely finished, as recommended in this report, both the initial and phased exhibits could be installed in their permanent locations as they are completed. The "Study Stations" also can be installed in their permanent locations to provide the complete story for each major area where some exhibits may be lacking. This will minimize the necessity for temporary exhibits to fill gaps in the exhibition sequence and which will later have to be replaced with long term exhibits.

Conversely, if a major portion of the Exhibition Area is left without mechanical and electrical systems, these systems would have to be installed prior to the installation of any new exhibits. In order to provide an economical mechanical system the Exhibition Area is divided into reasonably large mechanical zones. Therefore, it is not economically feasible to finish off small portions of the Exhibition Area within this matrix of larger mechanical zones. As a result, large areas of exhibit space would have to be finished before even a small portion of a later phase of exhibits could be installed. Inflation will greatly affect the final budget for the Exhibition Program. Leaving major portions of the building unfinished will prevent the Museum from realizing any savings which would result if the remainder of the Exhibition Program were built and installed in planned segments each year following the opening of the Museum.

Phasing Option II

A second phasing option is to defer construction of the aerial tramway in addition to leaving portions of the building as unfinished areas. This option would result in a total initial savings of approximately \$4,850.000. It could, however, reduce potential visitation to the Museum. In addition, one of the distinct advantages of this particular site -- the fact that the Riverbanks Zoo is directly across the river -- would be somewhat nullified. The establishment of a connection between these two institutions will have a significant positive impact on visitation to the Museum and will add immeasurably to the enjoyment and convenience of visitors to both the Museum and the Zoo.

Capital Budget - Phasing Option I

The following cost estimates are based on construction beginning in the fall of 1981. For this reason a 20% increase has been allowed for cost escalation between December 1979 and the fall of 1981.

1.1	Building Construction, including fixed furnishings such as auditorium seating, information booth in lobby, flooring materials in all support areas, but excluding flooring and wall finishes in exhibition areas. Current cost of \$65/sq.ft. + 20% escalation = \$78/sq.ft. x 124,000 sq.ft.	\$ 9,672,000
1.2	Building Construction of Unfinished Shell, excluding all finishes, and mechanical and electrical systems. \$38/sq.ft. x 66,000 sq.ft.	2,508,000
1.3	Site Development (roads, parking, landscaping, elevated walkway up hill, utilities, etc., but excluding site exhibit work).	650,000
	Subtotal	\$12,830,000
1.4	Basic Architectural and Engineering Fees of \$925,000 for completed building and site development (see Capital Budget in Section 5) less bidding and inspection service fees for finish work, mechanical, and electrical systems not constructed during this phasing option.	885,400
1.5	Miscellaneous Expenses, including special consultants, soils testing and borings, site surveys, etc.	70,000
1.6	Furnishings and Equipment, including collection storage systems, conservation laboratory equipment, partial office furnishings, workshop equipment, wall systems in temporary exhibit areas, etc., and including design fees, but excluding furnishings and equipment in the long term exhibition areas.	350,000
	Subtotal	\$14,135,400
1.7	Contingency @ ± 5%:	664,600
	SUBTOTAL (FACILITY COST FOR PHASING OPTION I):	\$14,800,000

Capital Budget - Phasing Option I

The following exhibition fabrication costs are based on construction beginning in early 1982. For this reason a 20% increase has been allowed for cost escalation between December 1979 and 1982.

2.1	Exhibit Construction and Installation for initial phase of long term exhibit construction. This phase is estimated to be approximately one-half of total long term exhibit construction. Current cost of \$80/sq.ft. + 20% escalation = \$96/sq.ft. x 30,000 sq.ft.	\$ 2,880,000
2.2	Exhibition Design and Supervision of Installation for initial phase of long term exhibits.	576,000
2.3	Planning for Future Exhibit Phases.	50,000
2.4	Exhibit Research for initial phase of long term exhibits.	150,000
2.5	Artifact Acquisition, Restoration, and Pictorial Rights for initial phase of long term exhibits.	450,000
	Subtotal	\$ 4,106,000
2.6	Contingency @ ± 5%:	194,000
	SUBTOTAL (INITIAL EXHIBITION COST):	\$ 4,300,000
3.1	Aerial Tramway including a lower terminal near the entrance to the Riverbanks Zoo, a tower on the Zoo side of the river, two cabins (15 passenger capacity), an upper station built into the Museum building, engineering, and installation.	\$ 2,000,000
	SUBTOTAL (AERIAL TRAMWAY COST):	\$ 2,000,000

Capital Budget - Phasing Option II

Same as Capital Budget - Phasing Option I, but defer construction of aerial tramway.

TOTAL - PHASING OPTION II

TOTAL - PHASING OPTION I

\$19,100,000

\$21,100,000

Recommended Staff Hiring Schedule

All of the fifty-four staff members projected for the new State Museum should be hired prior to the opening of the Museum in the summer of 1984 in order that the initial Education, Exhibition, and support programs to be offered to the public will be well planned and operational at that time. The following is a recommendation regarding the appropriate fiscal year that each of the staff members should be hired based on the importance of their work prior to the opening of the Museum. The fact that a particular staff member is included within a certain fiscal year does not imply a full year's employment during that fiscal year. In some cases staff members may be hired at the very end of a fiscal year in preparation for work that must be accomplished early in the following fiscal year.

Fiscal Year 1979/80

The present staff of the South Carolina Museum Commission includes the following eleven full-time and two part-time positions:

Director (will become Executive Director)
Deputy Director (will become Deputy Director of Programs)
Staff Assistant
Accounting Clerk III
Curator of History
Curator of Natural History
Program Administrator for State-Wide Services
(will become Director of State-Wide Services)
Registrar
Clerk Typist II (part-time)
Exhibit Preparator (part-time)
Divers (3)

Positions to be Added Fiscal Year 1980/81 (fourteen positions)

Deputy Director of Business
Secretaries (2)
Director of Exhibits
Curator of Science and Technology
Researchers (2)
Conservator
Assistant for State-Wide Services
Director of Educational Programs
Curator of Art
Coordinator of Salvage Act
Librarian
Public Information Director

In addition, the two part-time positions listed for Fiscal Year 1979/80 will be upgraded to full-time positions.

Positions to be Added Fiscal Year 1981/82

No new positions are needed this fiscal year.

Positions to be Added Fiscal Year 1982/83 (seven positions)

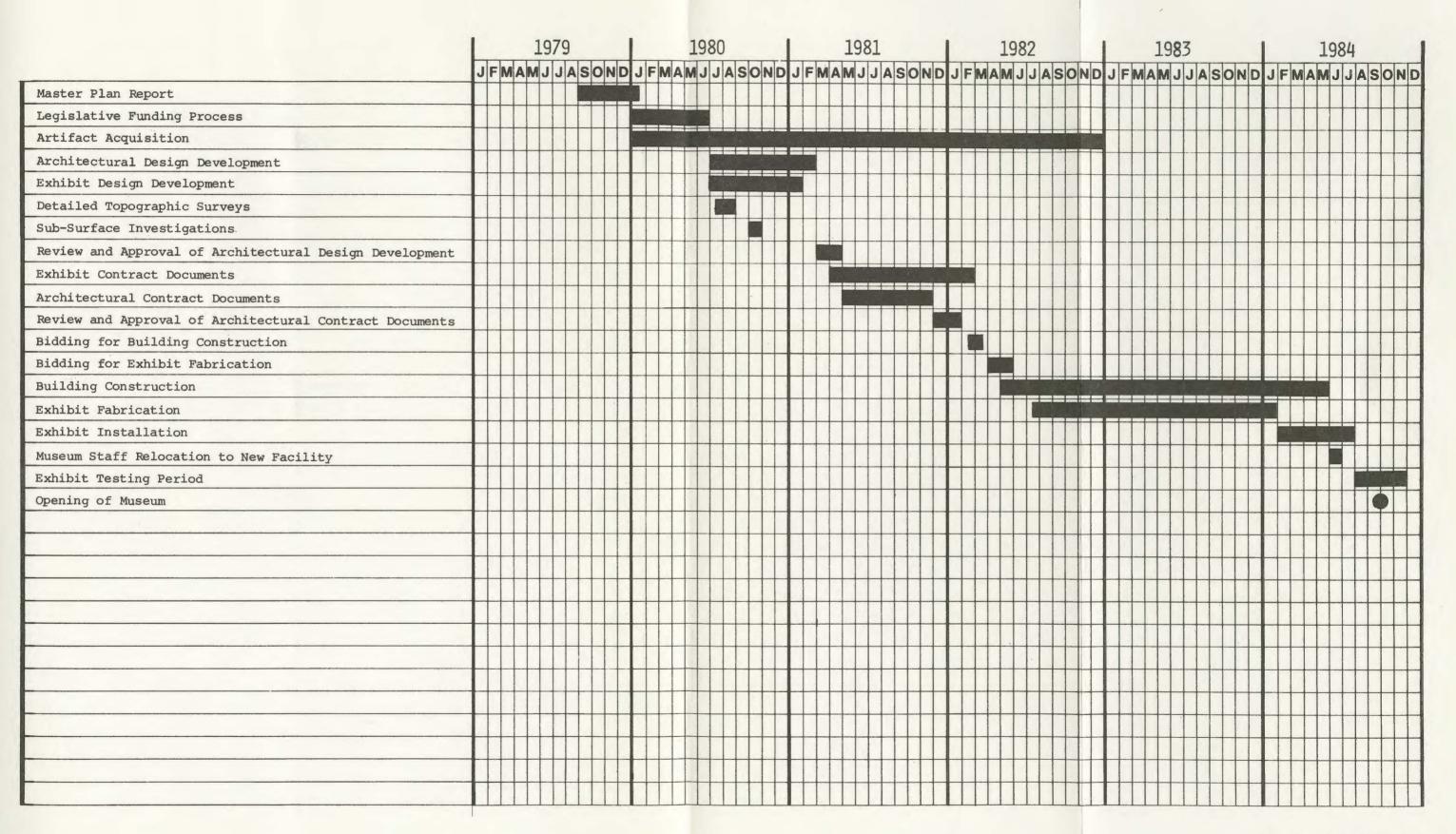
Assistant Conservator Graphic Designer Audio-visual Specialist Accounting Clerk II Cabinet Maker Carpenter/Painter Photographic Technician

Positions to be Added Fiscal Year 1983/84 (twenty positions)

Director of Volunteer Programs
Chief of Security
Assistant Chief of Security
Security Officers (7)
Museum Store Manager
Switchboard/Receptionist
Secretary
Exhibit Maintenance Person
Building and Grounds Maintenance Supervisor
Maintenance Mechanic
Public Program Coordinator
School Program Coordinator
Lecturer/Demonstrators (2)

Positions to be Added Fiscal Year 1984/85

No new positions are needed this fiscal year.



Research Data

Introduction

At the start of this planning work, interviews were held with the South Carolina Museum Commission members and staff and other people with an interest in this project or some meaningful input that they could offer. Discussions in these interviews covered the roles of the State Museum, specific programs that should be carried on in the new facility, the site, staffing, potential resources for capital and operating revenue, and potential visitation to a new State Museum.

In addition, staff members of the South Carolina Museum Commission traveled to museums in many parts of the country to talk to Directors and staff members about various aspects of planning a new museum. A <u>List of People Interviewed</u> appears in this section of the report, which indicates the extensive number of people who were involved in the planning process for this new facility.

Also included in this section of the report is a brief bibliography which was used to introduce the exhibit design consultants to this project.

The following people were interviewed either by the Museum staff or the Architect/Planners or both during the course of the work to produce this report. This list should not be considered complete; the number of people consulted during the planning work was so extensive it is possible that some names have inadvertently been omitted. We would like to take this opportunity to thank all those who participated for the time and advice they offered.

In addition to the members of the South Carolina Museum Commission and members of the South Carolina Museum Commission Advisory Board, many museum professionals in the state of South Carolina and members of the South Carolina General Assembly have reviewed the plans and made suggestions for the development of this Master Plan.

List of People Interviewed

Ashby, Gordon, The Office of Gordon Ashby, Inverness, California - Exhibit Design Consultants

Brooking, Dolo, Director of Museum Education, Spencer Museum of Art Cain, Margaret W., Science Consultant, South Carolina State Department of Education

Castles, R. L., Director, Land and Public Facilities, South Carolina Electric & Gas Company

Charles, Barbara, Staples and Charles, Washington, D.C. - Exhibit Design Consultant

Coffey, E. S., State Highway Engineer, South Carolina Department of Highways and Public Transportation

Counts, R. D., Deputy Director, Division of General Services, State of South Carolina

Crouch, Alexander C., Piedmont Engineers & Architects

Culclasure, Talley F., Property Insurance Administrator, Division of General Services, State of South Carolina

Davis, George R., Finance Director, Riverbanks Zoological Park

DePass, William B., Jr., Director, Heritage Conservation and Recreation Service, South Carolina Department of Parks, Recreation and Tourism

Edgar, Dr. Walter B., Department of History, University of South Carolina

Force, Dr. Roland, Director, Museum of the American Indian

Gaines, William, Program Director, Virginia Museum of Fine Arts

Gardner, E. Earl, State Business Enterprise Supervisor, Commission for the Blind, State of South Carolina

Gebhardt, Keith, former Exhibits Supervisor, Milwaukee Public Museum

Gregg, Ben, Jr., Director of Natural Resources, Governor's Office, State of South Carolina

Hatfield, Thomas, Art Consultant, South Carolina State Department of Education Hathaway, Walter M., Director, Columbia Museums of Art and Science

Heath, Bob - Bob Heath & Associates - Aerial Tramway Consultant, Cape Canaveral, Florida

Infinger, Paul H., Chief Counsel, Division of General Services, State of South Carolina

Jennings, Croft, Chairman, Columbia Museum of Art Commission Jennings, William R., Director, South Carolina Department of Parks, Recreation and Tourism

Jones, Dr. Lewis P., Department of History, Wofford College Kley, Ronald J., Head, Research and Collections Division, Maine State Museum Krantz, Palmer E., III, Director, Riverbanks Zoological Park Lazarus, William, Planetarium Director, Columbia Museum of Art and Science

Lee, Charles E., Director, South Carolina Department of Archives and History MacBeth, James, Chief, Bureau of Historical Museums, Division of Archives, History and Records Management, State of Florida

Martin, Phillip L., Traffic Engineer, Traffic and Planning Section, South Carolina Department of Highways and Public Transportation

Mazur, Marjorie A., Technical Services Librarian, South Carolina State Library McCalla, Steven L., Park Development Planner, South Carolina Department of Parks, Recreation and Tourism

McClure, Beth, Assistant Director, Planning and Development Division, South Carolina Department of Parks, Recreation and Tourism

McEachern, Furman E., Jr., Director, Division of General Services, State of South Carolina

Morris, Jack R., Director, Greenville County Museum of Art

Papenfus, Robert J., Programs Coordinator, Division of Parks, South Carolina Department of Parks, Recreation and Tourism

Peterson, Terry, Director of Education, Governor's Office, State of South Carolina

Plyler, Randolph, Insurance Field Agent, Division of General Services, State of South Carolina

Putnam, William, State of South Carolina Auditor and Secretary of Budget and Control Board

Rogers, Dr. George E., Jr., Department of History, University of South Carolina

Saverance, J. Fred, Assistant Division Director of Technical Services, Division of General Services, State of South Carolina

Shive, Roy, Mechanical Engineer, Governor's Division of Energy Resources, State of South Carolina

Sigmon, D. Ray, Historic Researcher, South Carolina Department of Parks, Recreation and Tourism

Singley, Katherine R., Conservator, Institute of Archeology and Anthropology, University of South Carolina

Staples, Robert, Staples and Charles, Washington, D.C. - Exhibit Design Consultant

Stuckey, Henry M., Business Enterprise Counselor, Commission for the Blind, State of South Carolina

Sullivan, Steve, Business Manager, Indianapolis Children's Museum

Swinney, H. J., Director, The Strong Museum

Thoma, Marna - Museum Store Consultant, New York, New York

Thompson, Milton, former Director, Illinois State Museum

Tobias, John L. M., President of the Board of Trustees, Columbia Museum of Art and Science

Wates, Wylma, Senior Archivist, South Carolina Department of Archives and History

Watson, LaVerne H., Director, South Carolina Confederate Relic Room and Museum

Welsh, Caroline, Project Manager, MarkeTechs, Inc., York, Pennsylvania Welsh, Peter, Director, Bureau of Museums, Pennsylvania

Williams, Dr. Charlie G., Superintendent of Education, Department of Education, State of South Carolina

VanCleef, Roger E., Director, Memphis Pink Palace Museum

Exhibition Program Bibliography

The following is a bibliography that the Museum Commission staff suggested to the exhibit design consultants as a means of familiarizing themselves quickly with the general outlines of South Carolina's cultural and natural history. The conceptual exhibit plan, as it appears in Section 8 - Exhibition Master Plan, is based not only upon these readings, but also upon the knowledge of staff members, consultants, and others, many of them listed above.

Bodie, Idella. South Carolina Women, They Dared to Lead. Sandlapper Store, Inc., Lexington, SC, 1978.

Cash, W. J. The Mind of the South. Vintage Books, New York, 1969.

Claiborne, Robert and the Editors of Time-Life Books. The Emergence of Man, The First Americans. Time-Life Books, New York, 1973.

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Jones, Lewis P. South Carolina, A Synoptic History for Laymen. The Sandlapper Store, Inc., Lexington, SC, Rev. Ed., 1978.

Johnson, Elmer D. and Sloan, Kathleen Lewis. <u>South Carolina, A Documentary</u>
<u>Profile of the Palmetto State</u>. University of South Carolina Press, Columbia,
1971.

Lander, Ernest Jr. and Ackerman, Robert K. Perspectives in South Carolina History. University of South Carolina Press, Columbia, 1973.

Lander, Ernest McPherson, Jr. A History of South Carolina, 1865-1960. University of South Carolina Press, Columbia, 1978.

Leopold, Aldo. A Sand County Almanac. Ballantine Books, New York, 1978.

Marion, John Francis. <u>The Charleston Story</u>. Stackpole Books, Harrisburg, PA, 1978.

Milling, Chapman J. Red Carolinians. The University of South Carolina Press, Columbia, 1969.

Rogers, George C., Jr. A South Carolina Chronology, 1497-1970. The University of South Carolina Press, Columbia, 1973.

Savage, Henry Jr. River of the Carolinas: The Santee. University of North Carolina Press, Chapel Hill, 1968.

Stephenson, Robert L., Ed. <u>Institute of Archeology and Anthropology Notebook</u>. The University of South Carolina, 1972.

Wallace, David Ducan. South Carolina, A Short History, 1520-1948. University of South Carolina Press, Columbia, 1969.

Whitelaw, Robert N.S. and Levkoff, Alice F. Charleston, Come Hell or High Water. The R. L. Bryan Company, Columbia, 1975.

Wood, Peter H. Black Majority, Negroes in Colonial South Carolina from 1670 through the Stono Rebellion. W. W. Norton and Company, Inc. New York, 1974.

Worthley, Jean Reese. The Complete Family Nature Guide. Avon Books, New York, 1977.

Wright, Louis B. South Carolina, A History. Published for American Association for State and Local History, W. W. Norton and Company, Inc., 1976.

Encyclopedia Britannica. South Carolina, The History, The Natural and Human Landscape, The People, The State's Economy, Administration and Social Conditions, Prospectus, Encyclopedia Britannica, Inc., 1979.