VISITOR CENTER PLANNING

Notes on Discussion Held in

EODC November 18-22, 1957, and

WODC February 4-6, 1958

Division of Design and Construction
and
Division of Interpretation

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

D3415-DI

March 24, 1958

Memorandum

To: Director

From: Chief, Division of Interpretation
Chief, Division of Design and Construction

Subject: Visitor Center Planning

We believe you will be interested in the highlights of the conferences on Visitor Center Planning held in EODC, November 18-22, 1957, and in WODC, February 4-6, 1958. These conferences were joint efforts of the Divisions of Design and Construction and Interpretation, with the Division of Ranger Activities represented part of the time. Notes on these conferences, and several resulting documents, are attached.

The following represent our impressions of some principal points developed in the discussions. These do not necessarily reflect the views of all the participants.

1. Open design is usually a desirable quality in a park Visitor Center, not only from architectural and landscape standpoints, but also for good park interpretation.

2. Rest areas for visitors are desirable, and where climate permits, they can be attractively and inexpensively provided outdoors, on terraces adjoining Visitor Centers, with seats, drinking fountains, toilets and telephone, thus relieving pressure on more expensive indoor space.

3. Visitor Center interpretation should be planned simultaneously with roadside and trailside interpretation. This is to insure that the Center and the field displays complement each other and that as much of the story as possible is told in the field through the park features themselves.

Field display planning is being accelerated in all parks and specifically in 13 parks with special Visitor Center design problems.

4. We need much better data on visitor loads than we now have. Alldredge's statistical studies should help park staffs provide it. Once visitor load is known, the Design offices have excellent data on floor space allowances per visitor for lobbies, assembly and exhibit rooms, and other public spaces, as presented in the attachments.

5. We need a better grasp of desirable visitor flow patterns between facilities for Visitor Center parking, information, rest, orientation, exhibits and park features. We are asking for fuller analysis of visitor flow in future prospectuses.

6. Greater attention needs to be paid to administrative requirements for park Visitor Centers when prospectuses are prepared.

7. Lobbies provide a transition area for the harassed visitor between the crowded highway and the park atmosphere which we hope will be peaceful. The lobby should convey a mood and invite a relaxed frame of mind, as well as provide practical information.

8. Assembly rooms are used primarily for regularly scheduled Audio-Visual programs on what to see and do in the park. However, such rooms may have other important uses, including conferences and meetings. Because of their multiple uses, they should normally have flat rather than sloping floors and be as adaptable to various uses as the assembly room in Jackson Lake Lodge.

9. Exhibit rooms require controlled lighting which must be largely artificial, but "token" daylight is desirable to avoid claustrophobia.

10. Information counters should meet certain minimum requirements of height, etc., as suggested in an attachment to this memorandum, and in some Visitor Centers may be movable to adjust to traffic and staffing conditions in different seasons.

11. As the "hub" of visitor use, Visitor Centers are a vital element in park development and MISSION 66.

The above partial statements fall far short of doing justice to the very stimulating discussions in the two conferences. We hope, therefore, that you will examine the attachments, which give a better idea of them.

For concrete action now to improve Visitor Center Planning the following steps have been or are being taken, in consultation with other interested divisions:

a. New instructions on museum prospectuses are in preparation.

b. Guidelines on information counters and assembly rooms are being readied for distribution to the field, and others are in preparation.

c. Pilot plans for roadside exhibits for Everglades and Bryce are in preparation, closely relating roadside displays to Visitor Center presentations.

d. Developed area, or "regional" studies are in preparation for 11 parks the objective of which is to integrate Visitor Center exhibits, signs and markers, Audio-Visual presentations, publications, self-guiding trails, roadside displays, overlooks and other features of the park presentation, and present them in the order in which they will be experienced by visitors.

e. Instructions are in the mill requesting superintendents who have new Visitor Centers to report on their experiences at regular intervals over a two-year period, so that future projects can benefit from past experience. These will supplement reports already received.

f. We expect to work closely with the MISSION 66 staff and other divisions on the study of Visitor Centers requested by the MISSION 66 Advisory Committee.

Your attention is called particularly to the following items in the attachments:

a. Guidelines on Information Counters.

b. Guidelines on Assembly Rooms.

c. Cabot's statement on visitor flow.

d. Summary of EODC Conference by John Doerr.

e. Summary of WODC Conference by Lyle Bennett.

f. Doty's charts of Visitor Center capacities.

Ronald F. Lee

Ronald F. Lee
Chief, Division of Interpretation

Dick Sutton

Dick Sutton
Acting Chief, Division of Design
and Construction

Attachments

Copy to: Regional Directors, Regions One, Two, Three, Four and Five
Attention: Regional Chiefs of Interpretation
Chiefs, EODC and WODC

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SUMMARY OF GENERAL DISCUSSION
OF VISITOR CENTER DESIGN PROBLEMS
November 18, 1957

CONFERENCE ON VISITOR CENTERS, EODC
November 18-22, 1957

It was appropriate that we first discuss matters of design and function of interpretation-information facilities generally common to all Visitor Centers. We recognize that in some respects the Visitor Center is a new concept, a new experience for the Service. While our experience is limited to two operating Visitor Centers in Colonial NHP and one on the south rim of Grand Canyon National Park, we do have many years' experience in the development and operation of museums to draw on, and likewise the experiences of "outside" organizations in their efforts to provide orientation and information in the initial contact with visitors.

Our experiences with the three Visitor Centers, plus the experiences we are having with Centers in various stages of planning and development, emphasize the need for close cooperation between the interpreters and the architects right from the early stages of planning. In furthering this cooperation, Mr. Lee instructed the respective Regional Chiefs of Interpretation to advise the EODC by memorandum of the current status of museum prospectus preparation. EODC will in turn send a representative to a park at the appropriate time to advise and assist in the final stages of prospectus preparation. Mr. Lee's office should be advised of these actions by copies of memoranda. A further phase of close coordination will be to advise EODC respecting progress of a museum planning team working in a park on an exhibit plan. It will be advantageous for EODC to send a representative to the park to review with the team and superintendent the exhibit plan.

The value of the museum prospectus as an essential document to planning is recognized. It contains data needed in every phase of planning. The question was raised, "How final is the museum prospectus?" It was agreed that it is a basic document although not inflexible. The museum prospectus is approved as the basis for beginning preliminary drawings, and is not a rigid formula within which they must be kept. Any major departures from the prospectus after it has been approved should be taken up initially with those most directly concerned in the park and the region, and if need be, with the Washington Office.

It is the consensus of the Conference that we should explore the need for a supplement to the museum prospectus, a supplement that describes the functional plan of the various facilities,

the Visitor Center, etc. The supplement, in addition to other things, would define the objectives of interpretation-information, estimate the extent and character of public use, and describe what facilities are needed and how they must function. It is agreed that for exploratory purposes the supplement will be referred to as SUPPLEMENTARY VISITOR CENTER INFORMATION. Each Region represented at the Conference agreed to initiate the Supplementary Visitor Center Information by designating one park in each Region to proceed with preparation of the supplement. The Museum Laboratory in cooperation with EODC will prepare an outline for the supplementary information. In this preparation, reference should be made to the Check List for Preparing Project Construction Proposals, May 1957.

In connection with the prospectus it was suggested that the diagrammatic floor plan should be replaced by a flow or sequence diagram. The present "floor plan" tends to become a building.

The supplement to the museum prospectus need not be lengthy, preferably not, but should contain essential details of how each unit of information-interpretation of each Visitor Center is to function. The point of detail was well illustrated by the problem of designing an information-sales counter for the lobby of the Flamingo Visitor Center. The Superintendent has asked for a plan. He has submitted a sketch with the suggestive phrase, "make it sing," meaning, he wants something "special". It was not until we called him on the telephone that we learned that he believes the counter must be located adjacent to an office in which the attendant will work when not behind the counter; that there will be no sales at the counter; and that there will be need to have at least two charts and a limited amount of information reference material on hand, plus limited under-counter storage for a day's supply of free informational literature. We believe a circular or oval-shaped counter located in the center of the Flamingo Visitor Center lobby would be most convenient to the flow of traffic. By designing the counter in sections as a moveable unit, it could be in part moved to the corner adjacent to the attendant's office during seasons when visitation is low.

As a result of discussion on information counters, Mr. Lee assigned Mr. Kahler to work with Mr. Benson of EODC toward producing guide standards for information counters. Mr. Benson will work with Mr. Kahler. The Committee may wish to consider and recommend respecting location relationship between the information counter and an office, or between the counter and the exhibit room as well as in relationship to the flow of traffic and other aspects that will come to their attention. Discussion brought out some disadvantages of information counters along a wall or in a corner, and the advantages of a center-of-the-room location in the larger

Visitor Centers. It was the consensus that information-sales counters should be designed as moveable units.

Discussion brought out that in future planning consideration should be given to providing more space in the lobby of the Visitor Center.

In connection with the discussion of lobbies, the question was raised as to the effectiveness of informational exhibits in the lobby. It was pointed out that some types of information might be more effectively dispensed by means of simple leaflets which the visitor could select from a wall or counter rack.

Lobby problems at Colonial give emphasis to the lack of drinking fountains. Similar Grand Canyon's Visitor Center lobby has a drinking fountain problem. It is the consensus that there should be more fountains; they all do not have to be in the lobby, and some should be designed to accommodate the children.

Public telephones -- should they be in the Visitor Center? They may be in the Visitor Center, they may be out-of-doors, or both, depending on circumstances. No conclusions reached on this subject. The suggestion was made that hotel and lodge concessioners might provide in some Visitor Centers, direct lines to facilitate making reservations, as some hotels do in providing direct lines at airport terminals.

The lobby will be the point of entrance to the Visitor Center. From the lobby there should be easy flow to other units of the center, particularly to the exhibit room or rooms and the auditorium or audio-visual room. Exhibit space should provide a "circle" route, eliminating as much as possible "back-tracking" through the exhibit space. From lobby to exhibit room and back to lobby could add elements of confusion. There was no discussion as to whether exit from the Visitor Center should be via the lobby. The possibility of exiting to circulation units other than lobby should be considered.

What can be accomplished through design to provide a feeling of "openness" in the Visitor Center, "openness" that will invite people in, and when in, provide them with a sense of still being a part of the out-of-doors? It is the consensus that where there is a significant view, design should provide the view from the Visitor Center. More thought should be given to providing rest areas in lobbies or on terraces outside. A few chairs or benches would be an essential facility of the rest area.

Could the feeling of "openness" be extended to the exhibit rooms? It was pointed out that some objects on display would

deteriorate rapidly in natural light. Mr. Lewis has significant data on this subject. In this connection, the Dinosaur Visitor Center was mentioned as an example of an exhibit room where natural light and "openness" predominate. Windows and doors in exhibit rooms do reduce the amount of usable wall space.

It was the consensus that audio-visual programs should not conflict with the functioning of other units of the Visitor Center. It was agreed that we need more advanced planning and better design for audio-visual presentations and self-operating devices.

In the light of experiences at Grand Canyon and Colonial in exhibit rooms and auditoriums, we must design to avoid distracting noises and poor acoustics.

On the question whether public toilets should be accessible from inside the Visitor Center, it was the consensus that in some cases access should be indoors, in other cases out-of-doors, and in other cases access should be provided both from indoors and out-of-doors, depending on circumstances. Similarly, there was discussion of the need for dark room facilities. Certainly, experience has demonstrated public need in certain parks for a place to unload a "jammed" film. Perhaps, the necessary total darkness can be provided in many Visitor Centers in small rooms normally used for storage or other purposes. We should scrutinize more carefully requests for dark-rooms that provide developing, printing, and enlarging facilities.

It was the consensus that the Visitor Center, particularly the exhibit, audio-visual, and orientation facilities should bear close relationship to the field exhibits. Refer to the last paragraph of this summary for the "transition" concept of the Visitor Center.

Reference should be made to the reports on the first season's operation of the two Visitor Centers in Colonial NHP and one in Grand Canyon National Park. The reports were reviewed and points pertinent to our Conference were discussed. Reference should also be made to Jack M. Crannell's report on his observations at Colonial while employed as a visual-aid consultant.

As Visitor Centers are established, thorough observations of their use, strengths and weaknesses should be recorded each year and reported to the Director's Office. From the reports, we should profit by our experiences in the design and equipping of Visitor Centers.

Visitor Center location was discussed. The good points of the location of the Colonial Visitor Centers were mentioned. There was

difference of opinion on the best location for the Visitor Center near the east entrance to Everglades. All factors influencing location have perhaps not been fully explored. One factor seems evident that Centers should be at logical stopping places near features of interest. When such is not possible or other factors are more important, approach road design and adequate signing must encourage and invite visitors to stop at the Visitor Center. It is the consensus that Visitor Centers near park entrances should serve as the transition between the "outside" and the park. Creating a park mood in the mind of the visitor, preparing him for the park experience, providing information or orientation, creating an awareness of park values and quality of service are all parts of the transition.

John E. Doerr
Chief Naturalist

SUMMARY OF GENERAL DISCUSSIONS
OF VISITOR CENTER DESIGN PROBLEMS

CONFERENCE ON VISITOR CENTERS, WODC
February 4, 1958

The meeting was initiated with reports on experiences with "Pre-Mission" Visitor Centers. Mr. Lewis described the facilities and operations at Williamsburg, Jamestown, and Yorktown. The recently completed Visitor Center at Grand Canyon has been reported as being used by not more than 15% of the total visitors and a question was raised as to whether such large and costly facilities could be justified where a low percentage of use was anticipated. The location in this instance was believed to be a factor; however, increased use is expected with completion of overnight accommodations and campground in the vicinity. Other problems mentioned included difficulties with keeping mechanical devices in working order, noise and acoustical deficiencies, circulation and access to assembly rooms.

It was felt that the Superintendent's report on the Grand Canyon Visitor Center was not adequate as a guide to future design and that a more detailed form of report should be developed and submitted semiannually on all new Visitor Centers.

A discussion of control of the furnishing and interior decorating of Visitor Centers developed from an incident at Carlsbad Caverns where a large number of oil paintings donated to the park have been hung in a manner as to detract from an otherwise satisfactory architectural appearance. Other instances were cited where lobbies were unfortunately cluttered to the extent as to give a very poor impression to visitors. Messrs. Lewis and Bennett were designated to draft a statement for a field memorandum to restrain and guide park personnel in the use, furnishing, and decorating of interiors of these buildings.

The term "Visitor Center" is sometimes confusing to the public as it is an unusual and specialized facility which may be associated with shopping centers with which the general public is familiar. The term Visitor Information Center was considered but no fully satisfactory descriptive name has been proposed. Similar facilities were originally called administration-museum buildings where such functions were combined and later the term Public Use Building apparently came into use simultaneously in various offices as a new concept. As the combinations of facilities provided in Visitor Centers and the purposes for which they are designed vary between parks and within parks, clarifying definitions and names such as were developed for museums should be of assistance in identifying the use and relationship of individual structures.

The above discussion led to the suggestion that "Museum Prospectuses" should be called Visitor Center Prospectuses" to conform to the present concept of such interpretive facilities. A check list and instructions as to information to be provided for the design of administrative facilities should be prepared and used where these facilities are combined as well as where separated. This deficiency may be partly attributed to the association of the term "Visitor Center" primarily with visitor facilities.

The lack of consistency between prospectuses and PCP's in many instances with a resulting inadequacy in estimates received attention. The recent submission of a prospectus with PCP enclosed was exhibited as an unusual example in which the detailed description of facilities was combined with the programming instrument for funds which insured simultaneous review of both and reduced the possibility of changes in one not being reflected in the other as occasionally happens. The submission of the PCP - or a revised PCP if appropriate - at the same time the prospectus is submitted was agreed to be desirable as a regular procedure.

Various information and interpretive facilities with the same park may be presented for consideration in several prospectuses and other documents. A supplement to the prospectus discussed in the EODC meeting was described as intended to present the overall interpretive planning and identify the place in the overall scheme of the particular structure presented in the prospectus. Objectives were raised to the introduction of new forms being developed of which the "Statement of Requirements" is another example when there are forms already available if properly used and kept current. Mr. Thomas explained that the interpretive section of the Master Plan Outline was intended as the device to coordinate all of the information and interpretation for a park including structures, signs, and literature but that considerable difficulty was encountered in getting these prepared or revised to keep them current. The interpretive plan is intended to show location and geographical relationship of interpretive facilities and supplement the outline. Museum prospectuses may present new or different thoughts on development or duplicate the interpretive outline to a considerable extent. The preparation of the prospectus as a supplement to the interpretive outline and plan was suggested as a means of insuring coordination, making effective use of both documents and reducing duplication and work required for preparation.

Mr. Lee expressed a desire to see the information and interpretive services presented in a sequence as experienced by the visitor and from his viewpoint. If related to the time the average visitor allows himself for a visit, and the reactions and problems encountered by a visitor in unfamiliar and sometimes overcrowded surroundings can be realistically included, such a study could be

revealing as to the extent proposed developments actually contribute to "enjoyment of the people." Bryce Canyon was selected for working out a procedure for this study.

The usefulness of flow diagrams and diagrammatic plans was discussed and both accepted as useful in clarifying and presenting proposed circulation and relation of units within a facility in simple form. (Some confusion appears to exist as to the meaning and purpose of flow diagrams, diagrammatic plans and schematic plans.) However presented, it is evidently agreed that circulation is accepted as the "backbone" of any plan and should guide the visitor and assist him to make decisions. The flow pattern varies with visitor program and the relationship of the Visitor Center to exterior exhibits and their proximity to the building.

The determination of the capacity of spaces and facilities in a Visitor Center and the allowances to be made for future growth and the possible change in the place of the Visitor Center in the overall interpretation program in the future present difficult problems. Fairly well established floor space allowances for various uses of spaces have been developed but are more or less empirical and with respect to certain uses the rate of flow is a better measure of capacity.

Circulation or flow received further attention in discussing lobbies of Visitor Centers. It was suggested that the lobby should set the mood for the interpretation which could be integrated with the orientation and information functions. Although the latter functions could be provided elsewhere it was agreed the lobby was the more appropriate location. However, audio devices are not desirable in this space. Where good views of exterior features in the landscape are available provision should be made to take advantage of them. Fireplaces were recognized as an aid in creating a friendly atmosphere in some locations. In connection with information devices it was suggested that questions asked by visitors might give a clue to the information to be presented and in some locations concern with camping or overnight accommodations available would predominate.

It was noted that in some instances lobbies were barely adequate to provide interior circulation between the various public use spaces and where administrative facilities are included it is often difficult to attach all rooms to the lobby. The blocking of circulation by groups at information counters or drinking fountains would suggest that the size of lobbies is largely determined by the minimum space required to attach the adjacent rooms thus making them principally minimum enclosures rather than properly planned public spaces.. The importance of a lounge or rest area free of cross circulation to give the visitor an opportunity to find relief from

heat and other travelling discomforts and provide a receptive and relaxed attitude was considered highly desirable in some locations It was recommended that such provisions be included in the check list and the diversity of activities provided in lobbies should be given adequate space for their use. Among frequently neglected items is adequate provision for the sale of publications which continue to increase resulting in effect in an activity equivalent to a small concessions curio operation. An assembly room usually requires increased lobby or lounge space to provide a waiting area between programs.

In some locations advantage can be taken of exterior patios and porches or terraces to provide supplementary lounge space but usefulness is usually subject to the weather. Supplementary drinking fountains can usually be located outside. In all fountain installations an adequate number should be provided and special provisions for children should be made. Telephone booths can also be located outside; however, the standard equipment usually provided by telephone companies is objectionable in park areas. (There is a telephone cabinet mounted on a post produced by one manufacturer which is neat and much less objectionable than the standard booth. Also, see November-December 1957 Grist, page 5, for photo of cabinet designed and in use at Yosemite.) In general it was felt that Visitor Centers should be equal in completeness to typical well planned public facilities, and telephones and fountains should be provided inside unless there are adequate reasons for doing otherwise.

Registers are desirable in some instances but are frequently overlooked.

Moveable information counters were proposed to permit changing location for best control during periods of maximum visitation and for convenience of staff at other times. As a policy the suggestion was not received with enthusiasm as it is believed that the equipment required for an information station in a building includes more than a counter and if the counter design and location are done properly initially there should be no need to move it. A good proportion of lobbies in recent plans do not have the space to permit moving counters advantageously. It was recommended that sales be separated from information as the two activities interfere with each other and efforts to use the same counter space for both purposes have not usually been satisfactory.

Inadequate information as to function and possible multiple uses of assembly rooms was noted as typical in prospectuses. Mr. Lee noted that it is the policy of the Service not to provide rooms for assembly of the total visitation present at any time as a general rule. In most instances level floors and moveable seats are desirable to permit multiple use of space. More attention should be

given to the proper design of assembly rooms for acoustics. More adequate standards for installation of projection equipment, screens and sound are needed or at least more detailed information should be provided. For continuous programs automatic equipment has been developed and installations are proposed in buildings now under construction. It was pointed out that provisions for these installations were not now included in contracts and certain information such as electrical requirements were urgent if later installations are to be made.

Considerable difficulty has been encountered in the past in obtaining information on furring and special lighting requirements for exhibit rooms to permit them to be included in the contract work. Progress on exhibit plans has been such, however, that this lack of coordination should be reduced in the future although continuing difficulties in scheduling plans for Visitor Centers will present obstacles to coordination of effort. It was suggested that the cost of furring and special lighting be included as a separate item with exhibits in preparation of estimates as these items are related. However, when details of lighting and furring are available for inclusion in the working drawings this work becomes a construction item and is included in the building cost.

The need for closer cooperation in the development of color schedules and furnishings was brought out particularly if such work is to be included in the contract. This is necessary to insure reasonable consistency and harmony in interior work and to permit incorporation in plan finish schedules and in specifications. Material and information on furring and finishing received in the past has been difficult to use readily due to a lack of understanding of our procedures and requirements, particularly when plans and specifications are prepared by outside architects. It is necessary that we have the exhibit layout and some information on special lighting requirements at the time contract negotiations are conducted with outside architects as this work will affect their fees.

Opinions were expressed that the provision of photographic dark rooms in Visitor Centers is questionable as they tend to become hobby shops or storage rooms according to the abilities of the particular personnel available at the time. The plumbing, electrical, and cabinet work involved results in considerable expense and it was believed by some that the small volume of work required could be handled more economically by commercial establishments. This "commercial-industrial" activity should be investigated and a firm policy established.

Following the above general discussions the status of construction and planning of Visitor Centers for the 57, 58, and 59 fiscal years was reviewed.

Statement on providing professional assistance in the maintenance of a high quality in aesthetic features of Visitor Centers

An effort is made in design of Visitor Centers that they will not only efficiently serve the purpose defined by the park superintendent and his staff but will present an attractive and orderly appearance in which the Service can take pride and which will present an impression to the public of good management and a high quality of professional accomplishment. In some instances, however, it has been noted that there has been permitted the development of cluttered, inharmonious or otherwise detracting effects resulting from hanging excessive numbers of, or poorly placed or proportioned, pictures, signs, and plaques on walls, and of the addition of inappropriate furnishings and equipment.

It is accordingly recommended that superintendents consult and obtain the assistance of appropriate professional personnel where displays, interior decorating, and furnishing public buildings may be involved.

Lyle E. Bennett
Supervisory Architect, Western Office
Division of Design and Construction

DRAFT

CHECK LIST
For
PLANNING THE AUDITORIUM - AUDIO-VISUAL ROOM
of the
VISITOR CENTER

Introduction

Is the Visitor Center to have an auditorium? If so, this CHECK LIST may suggest to you facilities and architectural treatments that should be included in the design of the room.

Each auditorium or audio-visual room need not have all the features or facilities suggested by this CHECK LIST. You may think of others. If you do, please advise so that they may be included as this list is revised.

The term Assembly Room seems preferable to the term Auditorium.

Frequently, the architect in designing an Assembly Room does not have enough information on how the room is to function. This CHECK LIST should alert all concerned with the initial planning (the park staff) and those with designing (the architect) to Assembly Room facilities that should be considered as plans develop.

It is important for the park to supply the Design Office with complete information on how the Assembly Room is to function as a unit of the Visitor Center.

It will also be important for the park to supply the Design Office with complete information on what functions will be held in the Assembly Room. In many instances the Assembly Room should be a multiple-use room with the design treatment favoring the major function.

The park staff is in the best position to visualize how the Assembly Room is to function in the over-all program from the standpoint of the visitor and the staff.

This CHECK LIST was produced during the Conference on Visitor Center held in the EODC November 18-22, 1957. Participating in the Conference were members of the staff of that Office, representatives of the Division of Interpretation of the Washington Office, and key personnel from the Regions One, Two, and Five Offices.

The initial work of the CHECK LIST was done by Supervisory Architect John B. Cabot, EODC, and Chief Naturalist John E. Doerr, Washington Office, working as a special committee during the Conference.

This CHECK LIST should:

(1) AID IN PLANNING AND DESIGNING THE VISITOR CENTER ASSEMBLY ROOM,

(2) SERVE AS A CHECK IN AVOIDING POSSIBLE OMISSIONS OF FACILITIES DURING THE PLANNING STAGE,

(3) AID IN THE REVIEW OF PLANS AND DRAWINGS AT THE VARIOUS LEVELS OF CONCURRENCE AND APPROVAL, AND,

(4) BE A DISTINCT AID TOWARD GETTING AN ASSEMBLY ROOM THAT DOES THE JOB FOR WHICH IT IS INTENDED.

Items in the Check List

Acoustics
Air Conditioning
Amplifiers - See, Audio-Visual Programs and Equipment
Atmosphere of the Assembly Room
Audio-Visual Programs and Equipment
Black Board
Chart Board
Church Services in the Assembly Room - See, Use of Assembly Room
Coat Room
Code Limitations
Combination Assembly Room and Exhibit Room
Cost of Constructing the Assembly Room
Cost of Operating the Assembly Room
Doors - See, Entrances and Exits
Draperies - See, Walls, Windows, Acoustics
Electric Arrow Pointer - See, Pointers
Entrances and Exits
Exits - See Entrances and Exits
Floor
Flow Pattern
Heating
Intercommunication System
Lectern or Speakers' Stand
Lighting Assembly Room
Lighting Central Points
Lighting on Platform or Stage
Platform or Stage
Platform or Stage Approaches
Platform Use
Pointers
Projection Booth
Projection Equipment
Projection Screen
Projector Stand
Rest Area
Safety Factors - See, Code Limitations
Screen - See, Projection Screen
Seating Arrangements
Seats
Shape of Assembly Room - See, Size and Shape Assembly Room
Size and Shape Assembly Room
Sound Recording Facilities
Speakers' Stand - See, Lectern
Storage Rooms
Use of Assembly Room

Ventilation
Walls
Windows

THE CHECK LIST FOR PLANNING THE (AUDITORIUM) ASSEMBLY ROOM

ACOUSTICS - Good acoustics are essential. The ceiling of the Assembly Room must be acoustically treated and at least portions of side walls. See other items in CHECK LIST such as: Projection Booth, Walls, Draperies.

AIR CONDITIONING - Essential in some parks.

AMPLIFIERS - See, Audio-Visual Programs and Equipment.

ATMOSPHERE OF THE ASSEMBLY ROOM - It should be inviting. Wall, floor, and ceiling treatment; color, lights, draperies; pictures, maps or objects symbolic of the park, these and other things can do much to create an inviting atmosphere. An atmosphere of luxury should be avoided. Other items in this CHECK LIST will also suggest atmosphere treatments that will aid in avoiding the hard, cold, uninviting, regimentation of a box-like room.

AUDIO-VISUAL PROGRAMS AND EQUIPMENT - These programs, and the equipment to present them, require well-in-advance, detailed planning by the park staff. Each program - there may be need for more than one - must have a purpose in the scheme of interpretive services at the Visitor Center. The purpose may be single or multiple. There might be need for having two editions of the same program, one "pitched" for groups of children, the other for adult audiences. The things-to-do in-the-park, introduction or orientation, and "mood" or "background" programs are suggestive of purpose. The Visitor Center at or near the park entrance should help the visitor make the transition from "outside" into the park atmosphere and should prepare the visitor for the park experience. The audio-visual programs may be a phase of the transition experience.

With the purpose or types of audio-visual programs clearly defined the next step will be to decide how the programs are to be presented, continuous or at regularly scheduled intervals, etc. The final step will be deciding on the equipment to do the job from the standpoint of the visitor and the staff. The purpose of the A-V programs, how they are to be presented, and the type of equipment to be used will have a bearing on the architectural treatment of the Assembly or Audio-Visual Room. The Washington Office is prepared to assist and advise you in planning the A-V programs, and to call in special consultants if need be.

The sound of the A-V program must not be confusing to activities going on concurrently in other units of the Visitor Center.

These suggestions for A-V programs and equipment apply primarily to Visitor Centers to be constructed. A-V programs and equipment for existing buildings, historic structures, and as units in the museum exhibits are the subject of other planning check lists.

BLACKBOARD - If the Assembly Room is to be used at times for conferences and in-Service training, a blackboard will be essential. It should be moveable and a storage place for it provided.

CHART BOARD - A board or frame on which charts and maps can be tacked for use in conferences and in-Service training programs should be available. Like the blackboard, it too, should be put in storage when not in use.

CHURCH SERVICES IN THE ASSEMBLY ROOM - See, Use of Assembly Room.

COAT ROOM - This may be an "extra" you may consider unnecessary, but it may suggest a need.

CODE LIMITATIONS - It will be important for the interpretive staff and others who will conduct programs in the Assembly Room to be familiar with the code limitations or safety factors in relation to the Assembly Room. The architect has a responsibility to see that these factors are included in the design and ultimately in the structure. A resume of safety factors in relation to the Assembly Room, including a projection booth, is to be attached as this is put in final form.

COMBINATION ASSEMBLY ROOM AND EXHIBIT ROOM - Generally not good practice from a functional standpoint. The travel pattern, the use to be made of the room, and the number of exhibits necessary to do the job will be important factors in determining whether this combination is feasible. See - Walls and Atmosphere of Assembly Room.

COST OF CONSTRUCTING THE ASSEMBLY ROOM - The Assembly Room, because of necessary structural features, may be the most expensive unit of the Visitor Center.

COST OF OPERATING THE ASSEMBLY ROOM - It will be well to consider ventilation, heating, air conditioning, lighting, and other operating costs.

DOORS - See, Entrances and Exits

DRAPERIES - See, Walls, Windows, and Acoustics

ELECTRIC ARROW POINTER - See, Pointers

ENTRANCES AND EXITS - In considering this item reference should be made to the statement in the introduction on the relationship of the units of interpretation at the Visitor Center.

Assembly Room ingress and egress should be planned,
(1) to facilitate and encourage visitors to follow the planned scheme of interpretation for the Visitor Center,
(2) to avoid bottlenecks and traffic snarls inside and outside the Assembly Room at points of entrances and exits,
(3) to assure convenient entrance and exit in relation to the type of interpretive program being presented (continuous audio-visual or regularly scheduled),
(4) in conformance to safety codes,
(5) to assure that entrances and exits are 2-way sound barriers, thus preventing sound interference from the Assembly Room to other units of the Visitor Center and vice versa, and
(6) to do the job they are supposed to do, that is, large enough to not only provide public ingress and egress, but also to permit moving in and out any furniture or equipment that might be used in the Assembly Room.

The architect will need to be advised respecting any large pieces of equipment before he designs the size of doors. (1) and (2) above are basically aspects of the over-all flow pattern of the Visitor Center; (3) is also a flow pattern but one inside the Assembly Room; (4) a matter of public safety; (5) a matter of preventing areas of conflicting sounds both inside and outside the Assembly Room, and (6) is a matter of good planning.

The interpretive staff should provide basic data on the Assembly Room in the scheme of interpretation and the type of interpretive programs to be presented. The architect is thoroughly familiar with entrance and exit safety code limitations. Attached to this check list is information on code limitations that will be helpful to the interpretive staff in their planning. (Will be attached as this is put in final form).

Entrance and Exit planning bears important relationship to facilities inside as well as outside the Assembly Room.

Reference should be made to other items in this check list such as Seating Arrangements, Use of Assembly Room, Safety Codes, Size of Assembly Room, Coat Room.

EXITS - See, Entrances and Exits.

FLOOR - The floor will normally be flat and the flooring of type that will permit multiple uses. See, Use of Assembly Room. Request for a sloping, stepped or other than flat floor must be accompanied by special justification.

FLOW PATTERN - There are two major aspects to flow pattern: (1) the Assembly Room as a point of visitor concentration on the over-all flow pattern of the Visitor Center, and (2) within the Assembly Room proper. Respecting (1) above, it will be important for the architect to know where the Assembly Room fits into the orientation or interpretive scheme of the Visitor Center. Will it be desirable for visitors to go to the Assembly Room before or after the Exhibit Room experience? What will be the best location relationship between Lobby, Assembly Room, Exhibit Room and other units of the Visitor Center? Bottle-necks of traffic should be avoided. The visitor should be free to move as he desires; however, channelling without strict regimentation should encourage him to move logically through the interpretive scheme of the Visitor Center, giving him the most in the least time and without confusion to him and others.

Within the Assembly Room there will be a traffic flow from entrance to seats and then to the exit or exits, both normal flow and emergency. This flow should be as easy as possible for the visitor, with least disturbances to others. Accomplishing as easy flow of traffic in the Assembly Room will depend on certain elements, for example, the seating arrangement, lighting, type of programs, etc.

HEATING - Essential in many parks.

INTERCOMMUNICATION SYSTEM - If the Visitor Center is to be equipped with an intercommunication system, omit it from the Assembly Room, and consider carefully before putting it in exhibit rooms.

LECTERN - This piece of useful equipment may be simple in design and inexpensive or it may combine audio-visual controls and facilities. Do you desire it equipped with a reading light, signal device and other features?

LIGHTING ASSEMBLY ROOM - The lighting of the Assembly Room will be important in relation to the uses to be made of the room. A few examples will illustrate the importance of advanced planning, and the complexity of providing adequate lighting.

If one use of the Assembly Room is to be for continuous, day-time, audio-visual orientation programs, there must be enough light so that visitors can see to get in and out and yet not bright enough to diminish the effectiveness of pictures being projected on a screen.

Regularly scheduled programs for which visitors gather during a period of a few minutes before the program starts, and leave as a group at the end of the programs calls for the house lights to be on before the program starts and at the end. Maybe you'll want the lights to go down gradually at the start of the program and come up gradually at the end. The house lights in this case should be adequate for clear vision around the room, but need not be bright enough to "read the fine print." The Assembly Room in this case is not a reading room. You may want to syncronize music with the start and finish of programs, the "down" and "up" of the lights. The expense of these refinements of lighting must be considered.

If the Assembly Room is to have intermittent use as a conference room, for in-Service training and other activities, these uses will demand perhaps greater intensity of lighting than other functions. Natural light from windows may be best for some functions. See, Windows.

In creating the best "atmosphere" for the particular use or function of the Assembly Room, proper lighting will be important. The architect will be guided by information from the park on the Use of the Assembly Room and suggestions that will be helpful in arriving at lighting facilities desired by the park. In addition to Use of Assembly Room refer to, Entrances and Exits, Walls, Atmosphere of Assembly Room, Combination Assembly Room - Exhibit Room, Lighting Control Points, Safety Factors, Windows.

LIGHTING CONTROL POINTS - These should be located at the places most convenient to the staff conducting programs. The methods of conducting the programs will also influence the location. Normally, if someone is serving as a projectionist, he should control lights. Sometimes the speaker is also the projectionist. Projection booth, platform or stage, and entrances, are possible locations for lighting control points.

The possibility of need for more than one control point in the Assembly Room should be considered.

LIGHTING ON PLATFORM OR STAGE - The uses to be made of the platform or stage will determine the lighting facilities. If a lectern is to be on the platform it should be equipped with a reading light. Some speakers may wish to use an electric arrow pointer - hence an outlet on the platform should be provided. If charts or maps are to be displayed for conferences or training schools, one or two spot lights directed at the area of display will be convenient. The spot light control switch should be handy to the speaker. If there are small storage rooms in the wings of the platform, do not overlook the convenience of a light in them, with control switch outside or just inside the door.

PLATFORM OR STAGE - A platform (Preferable to the word stage) at the screen end of Assembly Room is desirable where seating capacity of the room is to exceed 150, and in some instances where capacity will be less than 150. Size and height of platform will be influenced by size and shape of Assembly Room, and elements of good design. Simplicity should prevail in platform treatment. See, Lectern, Lighting on Platform, Lighting Control Points, Storage Rooms, Screen, Platform Approaches, Platform Use.

PLATFORM OR STAGE APPROACHES - From floor level to platform the approaches should be on the sides, and where feasible by ramp rather than steps, particularly where platform wings are storage rooms. Ramps will facilitate rolling stacked units of chairs. See, Platform, Storage Rooms.

PLATFORM USE - Will a speaker be on platform during illustrated talks? If so, that fact must be known to the designer. It will influence to some extent the size of platform, position and maybe size of screen. You do not want part of the projected pictures on the speaker. See, Platform.

POINTERS - This may be a stick of a length suitable for the size of the projection screen, or maybe an electric arrow. The latter will require a power outlet on the platform or stage.

PROJECTION BOOTH - This facility can be most useful in many ways other than a place from which to project pictures. It may house and provide storage for equipment, and may provide space for making repairs to equipment and film. It is essential that the booth be planned around the equipment to be used in it, that adequate and proper power outlets are provided, that the booth be sound-proofed, ventilated, that the

projection openings be equipped with optical glass, that there be a glass observation opening, that there be a power control panel for "house lights" and other electrical facilities. A monitor speaker may be needed and, of course, projector stands. The architect can refer to standard plans for projection booths, and he'll know what safety factors must be built in to conform to code limitations, but only you who are to operate in the booth can tell him what equipment you plan to use it in and how it is to function. See, Projection Stand.

PROJECTION EQUIPMENT - With a knowledge of the types of equipment to be used, i.e., slide and/or movie projectors, and the functional range of them, the architect will have guide lines in designing the Assembly Room to make possible showing pictures most effectively.

PROJECTION SCREEN - The interpreter must indicate the size of projection screen that will be used. The size will be a factor in designing the height of ceiling. The length of projection and size of picture on screen, vertical and horizontal will influence determination of size of screen. The larger the Assembly Room the larger should be the screen picture. We should strive for large screen pictures. Screens should be placed with lower edge high enough to permit unobstructed comfortable viewing. Does the interpreter desire a roll screen, a fixed wall screen that can be obscured by sliding panels or hinged panels? If you are planning some special type of projection requiring a special screen, this must be known to the architect as he starts on the Assembly Room plan. Projected pictures should not lap over the screen onto the wall or draperies.

PROJECTION STAND - Your needs may not require a projection booth but merely a stand on which you will place projectors. There are good ones on the market. A specially designed, inexpensive stand can facilitate projection. The top should be large enough to hold the equipment you intend to place on it, for example, the projector or projectors, slide box, signal light, etc. A shelf $1\frac{1}{2}$ feet below the top may prove handy. The stand must be high enough to project over the heads of the seated audience. The stand should be located so that visitors moving into seats will not obstruct the projected beam. The base should be wide enough to assure not being tipped over. Good casters will facilitate rolling the stand into the storage room. They must have a locking device. Knowing where the stand is to be placed, there should be power outlets close by. You may want the power control panel for

house lights and other electrical equipment convenient to the location of the projection stand. See, Projection Booth.

REST AREA - Providing a rest area in conjunction with the Assembly Room may be feasible in only a few Visitor Centers but the possibility should not be overlooked, particularly in relation to utilization of space, for example, under a balcony or a suspended projection booth. See, Projection Booth.

SAFETY FACTORS - See, Code Limitations

SCREEN - See, Projection Screen

SEATING ARRANGEMENTS - The sketches, to be attached, illustrate standard types of seating arrangements and distance between rows of seats. The arrangement to be used will influence to some extent the number of seats (seating capacity); and will be influenced by size of Assembly Room, location of entrance and exits, and the type or types of use. Seating arrangement can provide for convenient public access and rapid exit. See other items on this CHECK LIST such as Code Limitations, Seats.

SEATS - Folding chairs are essential to facilitate multiple use of Assembly Room. Chairs must be of good quality, preferably metel, easily and compactly stacked on special dollies. The type used at Jackson Lake Lodge is excellent. See other items on CHECK LIST such as Use of Assembly Room, Seating, Storage Rooms, Seating Arrangements, Platform.

SHAPE OF ASSEMBLY ROOM - See, Size and Shape of Assembly Room.

SIZE AND SHAPE OF ASSEMBLY ROOM - The park staff is in the best position to estimate the number of visitors that will attend specific programs in the Assembly Room. If the travel pattern is such that there is a continuous, rather uniform travel throughout the day; or if visitors arrive by scheduled busses, several bus loads at a time, those facts should be presented to the Design Office for determining the size of Assembly Room needed. You may wish to consider an Assembly Room large enough to accommodate frequently the large gatherings at an evening program, a room that might be divided by folding doors, thus providing smaller rooms (two or more) which could be used concurrently during the daytime for visitor orientation talks and staff conferences. The architect will allow between 8 and 10 square feet per person in the Assembly Room depending upon aisle space, seating arrangement, entrances and exits. He also has standard guides in the size and shape of room in relation to length of projection, size of screen, angle of vision, ceiling height, etc.

The rectangular rather than a square room is generally more practical for an Assembly Room in which pictures are to be projected. Information supplied by the park on the travel pattern, use of the Assembly Room, type of projection equipment to be used, traffic flow pattern and other points will be helpful to the architect in designing the size and shape of room.

The major function in terms of number of visitors will be a controlling factor in determining the size of the Assembly Room. There will also be a relationship between size of Assembly Room and size of lobby. If funds do not permit constructing all the Visitor Center and you must think of making an addition in a few years, (maybe the addition will be an Assembly Room), be sure the size of the units in the initial construction are in proportion to the addition you plan. A small lobby in the initial construction may be too small when the Assembly Room is added.

SOUND RECORDING FACILITIES - There may be few instances where a small sound recording room could be justified. The item should not be overlooked. Where justified it might be in relation to projection booth. See, Projection Booth, Acoustics.

SPEAKER'S STAND - See, Lectern

STORAGE ROOMS - It will frequently be possible to enclose the wings of the stage to provide storage space for folding chairs, lectern, blackboard, chart board and other moveable equipment in Assembly Room. Doors to storage rooms should be of the sliding type or they should swing open on platform side to provide maximum storage space. Doors must be wide enough to permit easy movement of chairs and other equipment in and out of storage. See, Platform, Platform Approaches.

USE OF THE ASSEMBLY ROOM - The objective should be to provide for the visitor's needs. This may mean single use, but more often multiple use. Multiple use may include: Illustrated talks by a member of the staff, continuous automatic audio-visual programs, staff conferences, training schools, special group programs, religious services, social activities of the park community, etc. The design should favor the major function. See also, Floor, Seats, Seating Arrangement, Windows, Storage Space, Lighting.

VENTILATION - Forced draft ventilation will be essential in most Assembly Rooms. Ventilation system must be quiet so as not to interfere with sound projection. See, Projection Booth.

WALLS - Some wall space in the Assembly Room might be utilized for photo murals, diagrammatical maps, paintings, or decorative things that are symbolic of the park. Also see, Acoustics, Atmosphere of Assembly Room, Combination Assembly Room and Exhibit Room, Lighting, Windows.

WINDOWS - In considering multiple use of the Assembly Room it may be advisable to provide windows. If so, provision must be made for draperies that, when closed, will exclude daylight during day-time projection of illustrated talks. Draperies may enhance acoustics of the Assembly Room.

GUIDELINES FOR INFORMATION AND SALES COUNTERS

Preliminary Information

Before designing an information or sales counter, the Design Offices need the following information from the Superintendent:

1. The use of the counter: Is it for information services, sales counter, or both? Other functions?

2. How much personnel will normally be available to man the counter?

3. Are there any special storage space requirements?

The following information on counters has been gathered and will be useful in determining your requirements:

Location

1. Counters should be placed to best serve the public -- not as a convenience to the Park Staff. Would control major traffic.

2. Would not be located parallel to a bright window so visitor looks into glare as he tries to talk to the attendant. In some cases, it is advantageous to be located at a right angle to a window, so both attendant and visitor can turn their heads and look out to an interesting or explanatory view.

3. Flexibility in the location of the counter should be considered. In peak use seasons when adequate personnel are at hand, it should be located so as to control major traffic flow, but not so close to an entrance door as to block traffic. During off seasons, it might be moved to such a location that employee on slack days can carry on other activities, including the surveillance of museum exhibits.

Size

1. Storage space to be large enough to hold one day's supply of literature and whatever few aids may be needed. It is not a major storage facility.

2. Counter top need not be over 24" wide and not less than 54" long for each attendant. Height should be about 44". A standard adjustable drafting stool with back rest serves as a seat for the attendant.

3. Pigeonholes for about six types of folders should normally be provided approximately 9" high and 4-1/4" wide.

4. In some locations, U.S.C. and G.S. charts might be desirable. These are generally too large to mount on a counter top and might be handled as a wall display, or portable easel display.

Sales Counters

1. If sales and information are at the same counter, width of counter top should not be less than 24" to allow for top display of a certain amount of sales literature. The length will be determined by needs.

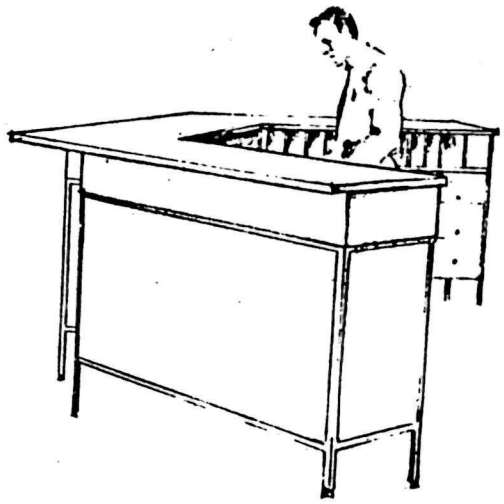
2. A locking cash drawer should be included as well as somewhat more storage space than required for an information counter, but again for only one day's supply.

Attachments:
Exhibits A, B, & C

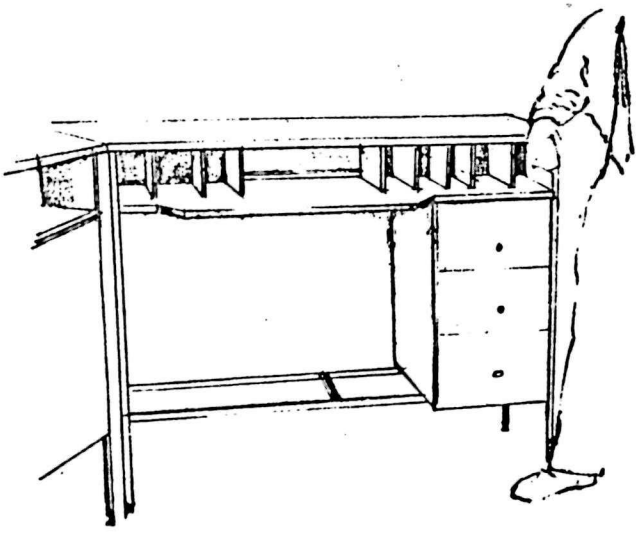
EXHIBIT A

SHEET 1

INFORMATION COUNTER



PERSPECTIVE SKETCHES
FROM PHOTOGRAPHS, COLONIAL WILLIAMSBURG VISITOR CENTER



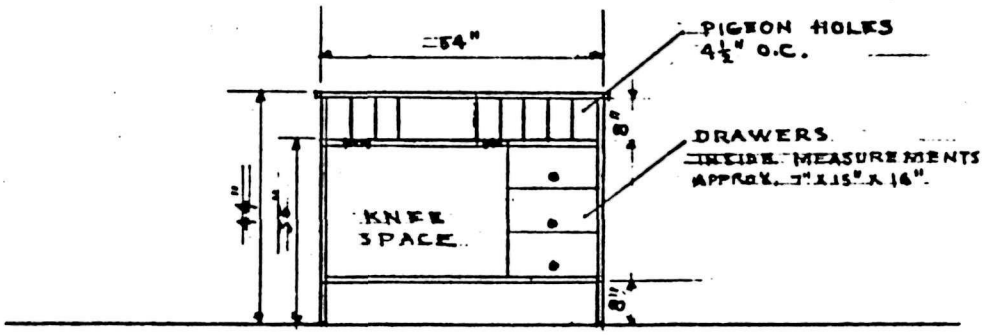
SEE ATTACHED SHEET 2 FOR BASIC DIMENSIONS & DETAILS

EODC NPS 11/19/57

EXHIBIT A

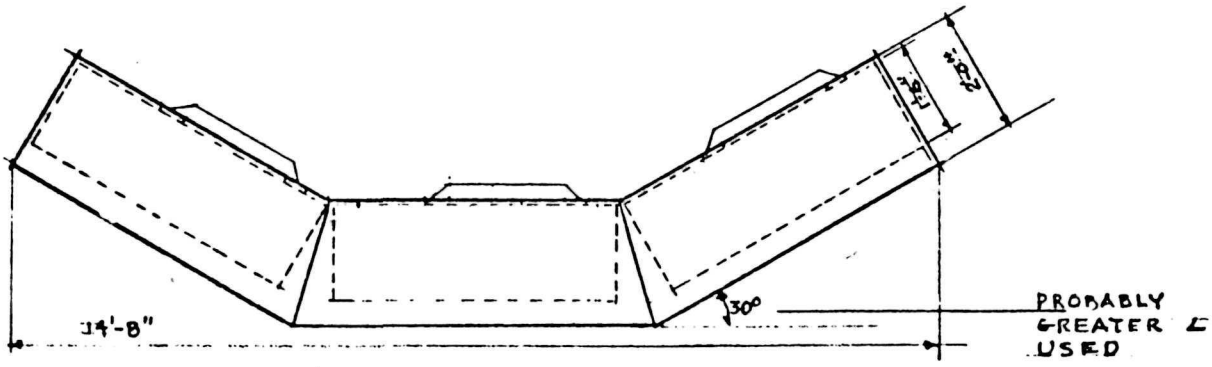
SHEET 2

EODC NPS 11/19/57



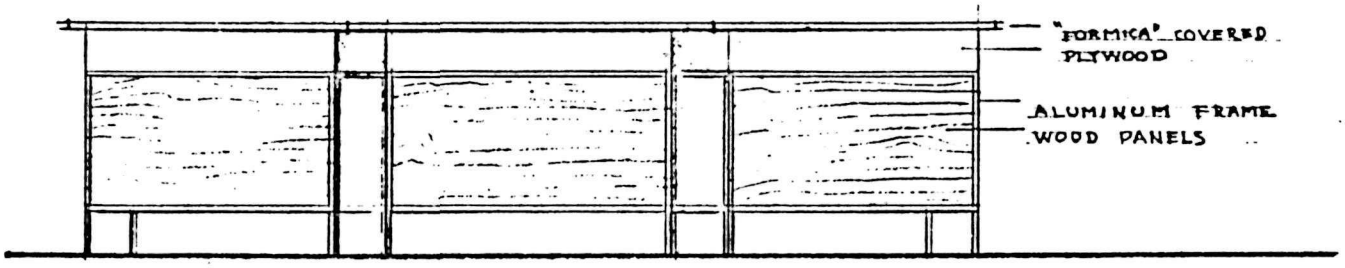
NOTE:
STD. ADJUSTABLE DRAFTING STOOL TO BE USED WITH THIS COUNTER

REAR ELEVATION EACH UNIT



TOP — 3 COMBINED UNITS

APPROXIMATE MANNER IN WHICH THIS TYPE UNIT IS USED AT WILLIAMSBURG VISITOR CENTER



FRONT ELEVATION 3 UNITS

INFORMATION COUNTER 3/8" = 1'-0"

INFORMATION COUNTER

COLONIAL WILLIAMSBURG

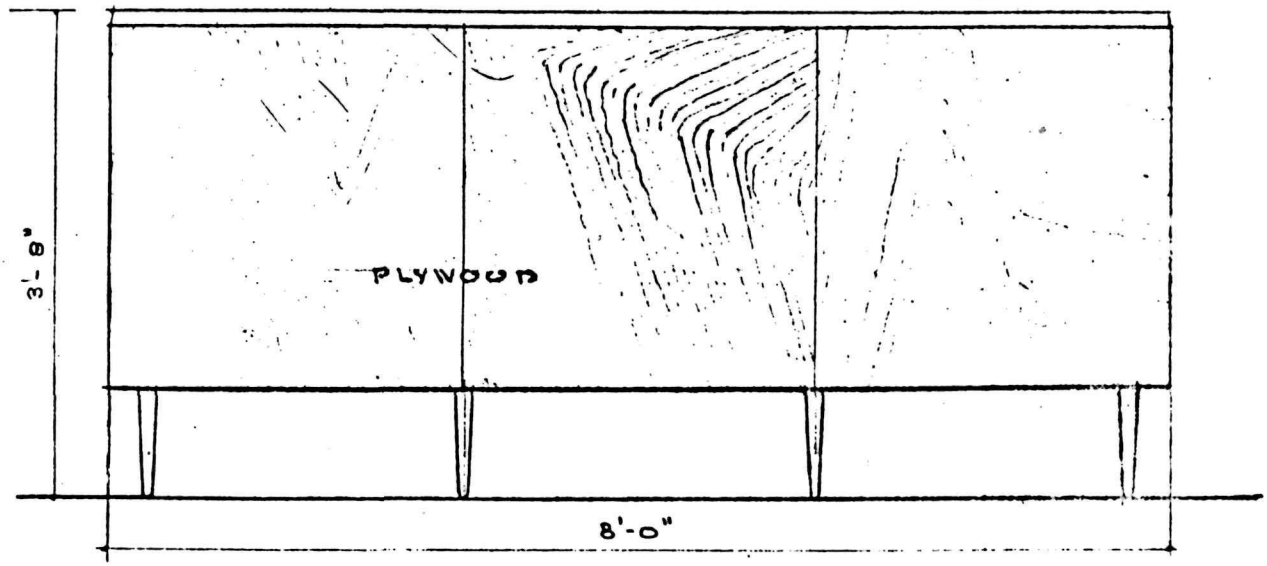
Height: 44-1/4 inches from floor to desk top

Width: 24 inches

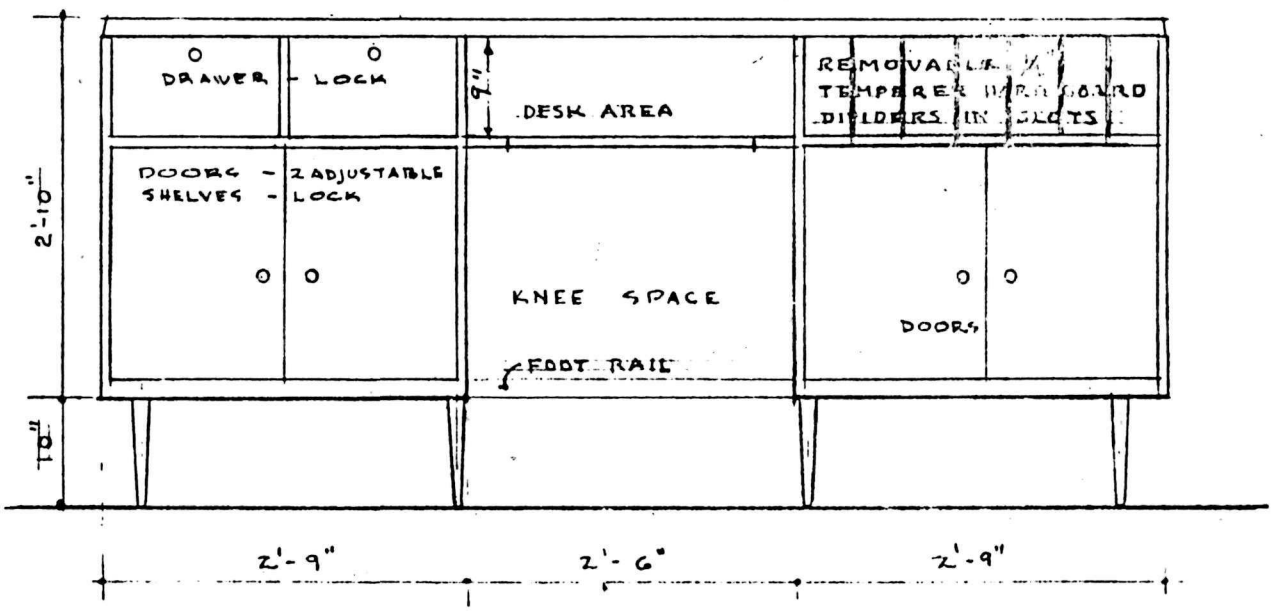
Length: 54 inches

The tops are made of formica and are interchangeable so that stands can be placed in a straight line or at an angle. The price per unit was approximately $420. They were manufactured by George Nelson and Co., 18 East Fifth Street, New York 22, New York. Mr. Gordon Chadwick was the contact man. Mr. Al Woods was the designer. He is now with Becker and Becker of New York, Merchandising Consultants. The metal work of the stands is furnished by Egli Company, 801 Third Avenue, New York 22, New York. Mr. Caruso was the contact man. The wood paneling was supplied by Walter P. Sauer Co., 3028 Starr Avenue, Long Island City, New York. Mr. Theodore Sauer was contact man. The chair was supplied by the Do-More Chair Co., Elkhart, Indiana -- Price: $70.

EXHIBIT B
SHEET 1



FRONT ELEVATION



REAR ELEVATION

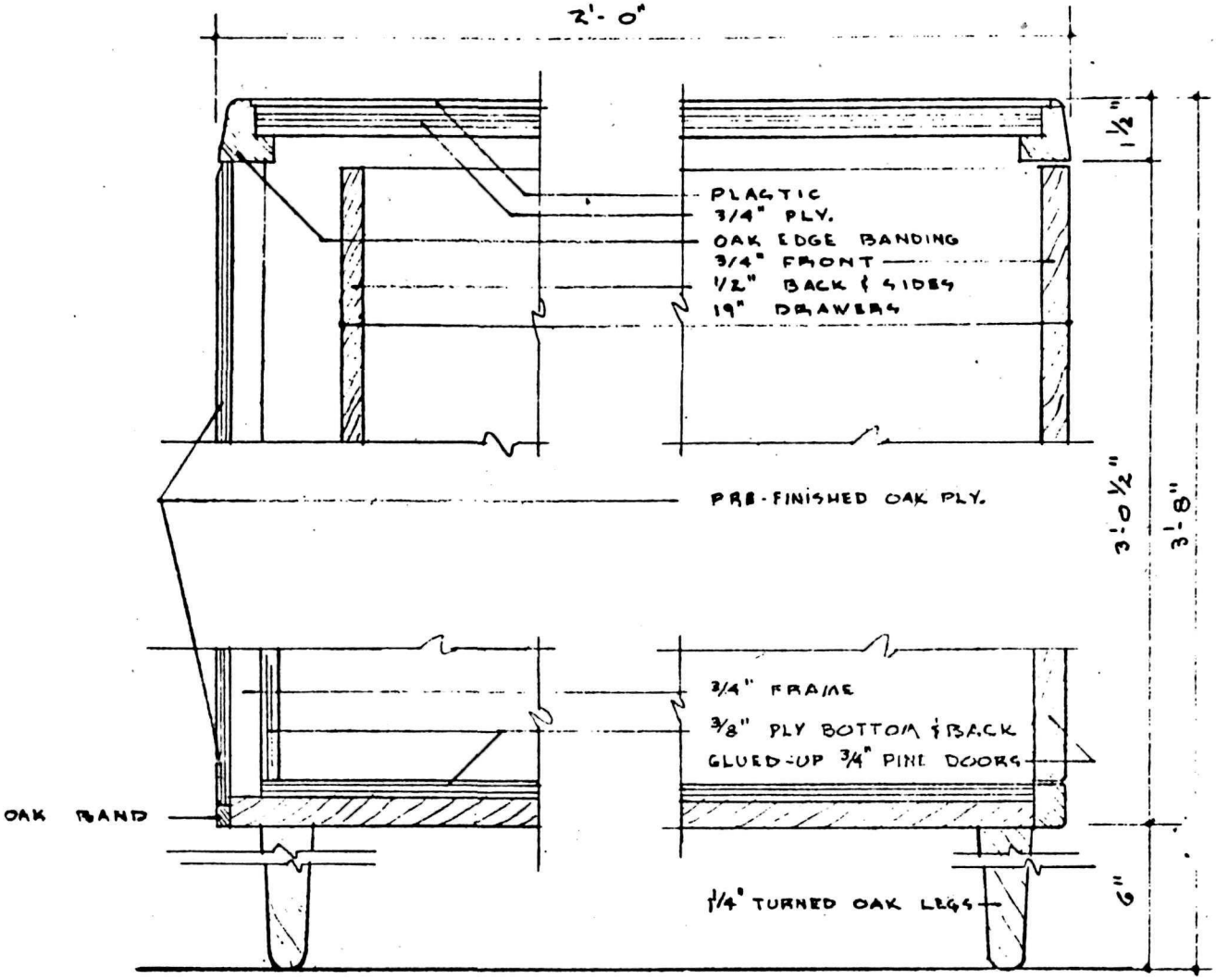
INFORMATION COUNTER

PIPESTONE NATIONAL MONUMENT

SHEET 7 OF 8 (REVISED ____)

N/A - PIP - 30003B
8-26-57

EXHIBIT B
SHEET 2

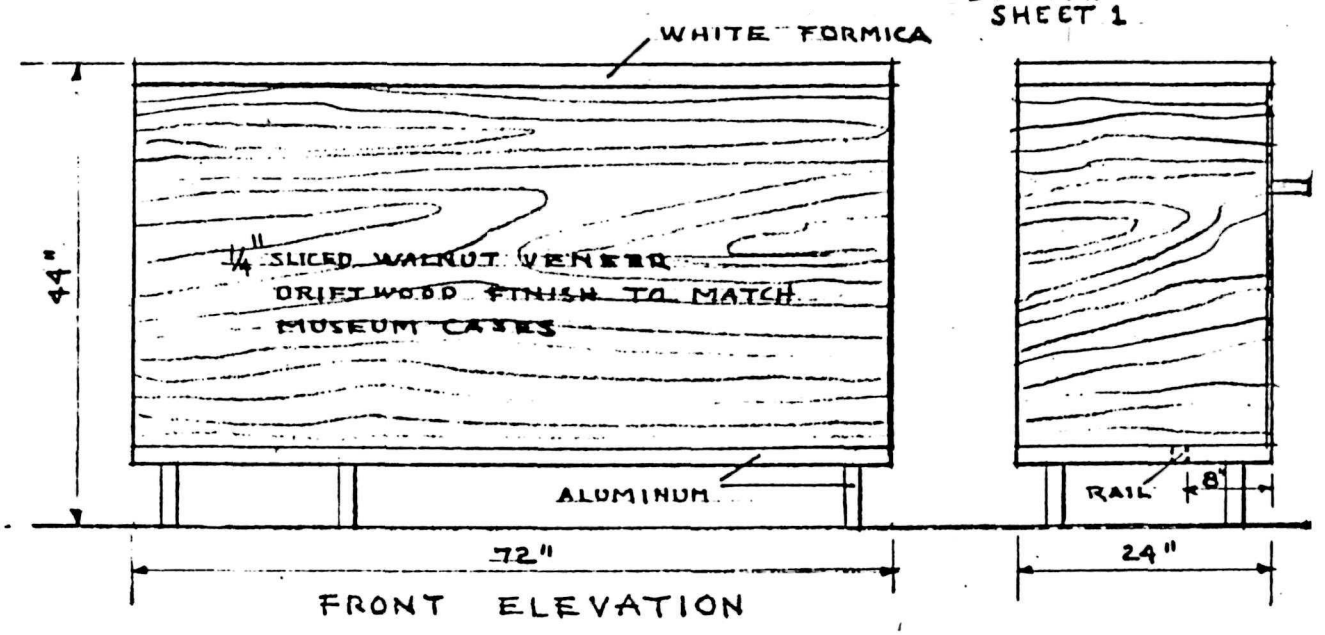


SECTION
SCALE 3" = 1'-0"

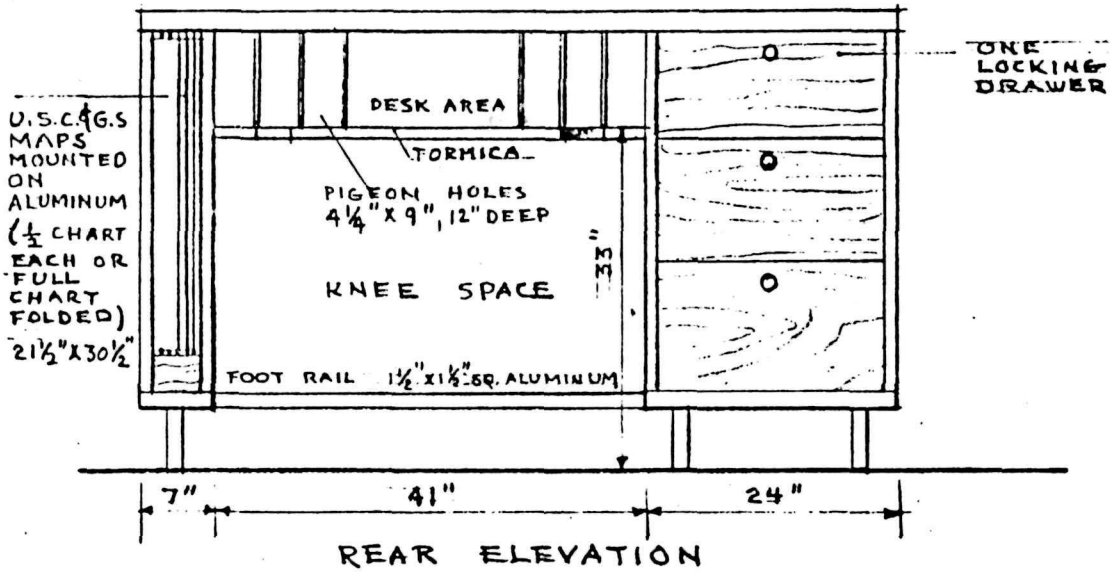
INFORMATION COUNTER

PIPESTONE NATIONAL MONUMENT
SHEET 7 OF 8
NM - PIP - 3003B
8-26-57

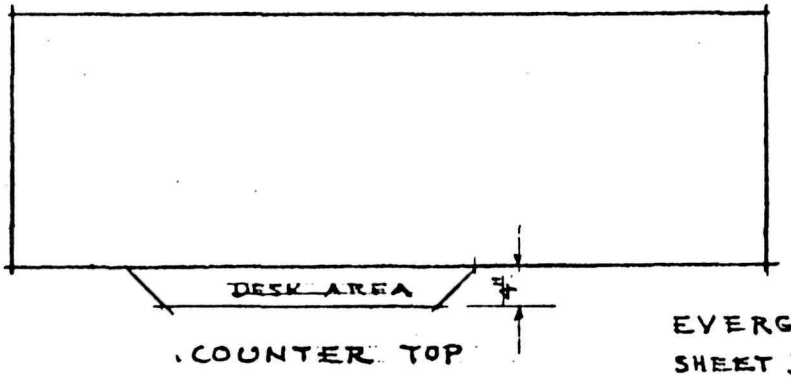
EXHIBIT C
SHEET 1



FRONT ELEVATION



REAR ELEVATION



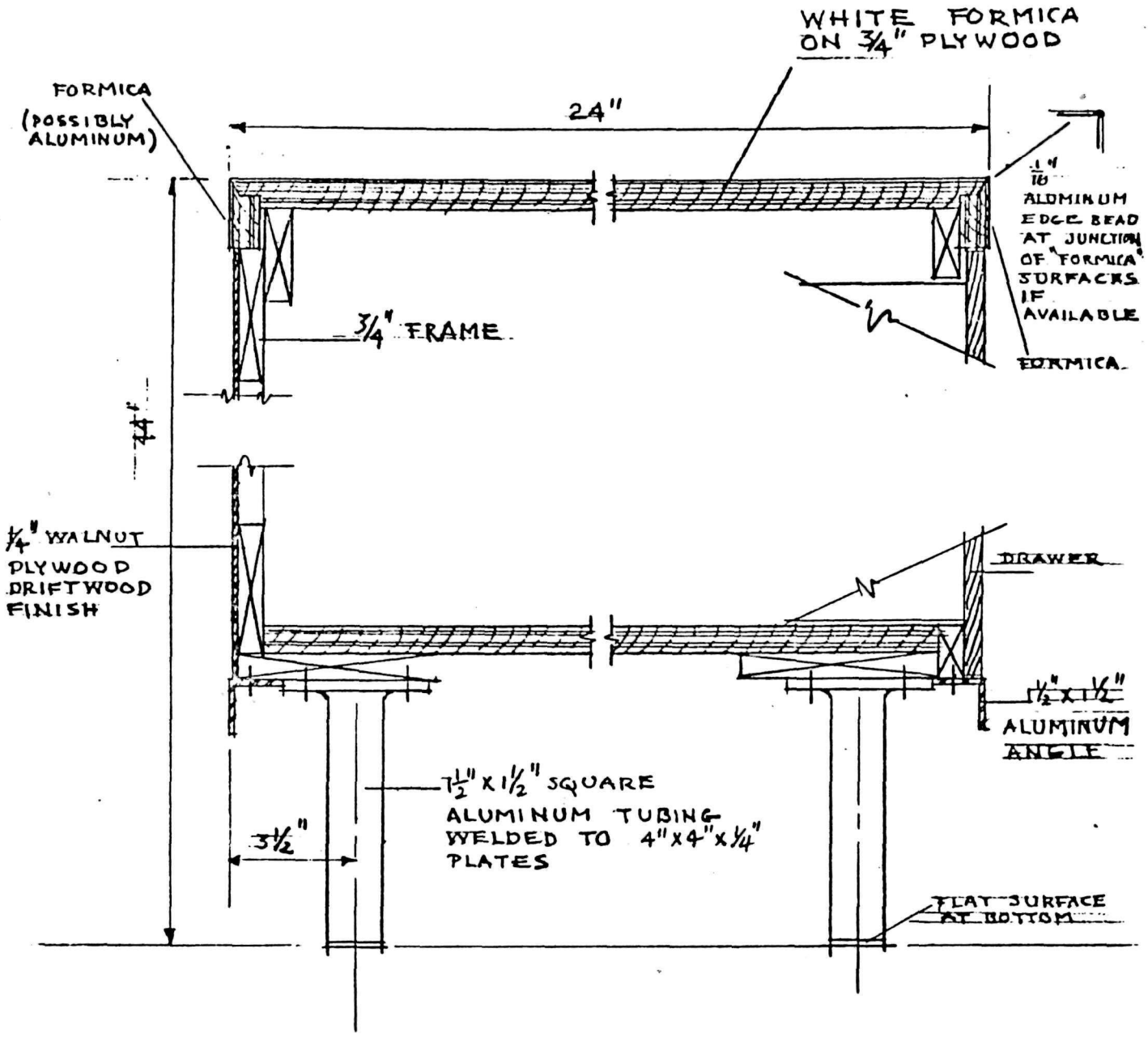
COUNTER TOP

INFORMATION COUNTER

SCALE 3/4" = 1'-0"

EVERGLADES NATIONAL PARK
SHEET 3 OF 4 NP-EVE-3116
11/20/57

EXHIBIT C
SHEET 2



SECTION
3" = 1'-0"

INFORMATION COUNTER
FLAMINGO VISITOR CENTER
SHEET 4 of 4 NP-EVE-3116
11/20/57

SPACE RELATIONSHIP DIAGRAMS
of
LOBBY, EXHIBIT ROOM AND AUDIO-VISUAL FACILITIES
at
BADLANDS NATIONAL MONUMENT
and
THEODORE ROOSEVELT NATIONAL MEMORIAL PARK

There are three steps to traffic flow diagraming: First, a traffic diagram for the entire Park; second, a flow diagram for the zone in which the Visitor Center is placed; third, the Visitor Center, which would include the parking area serving this building.

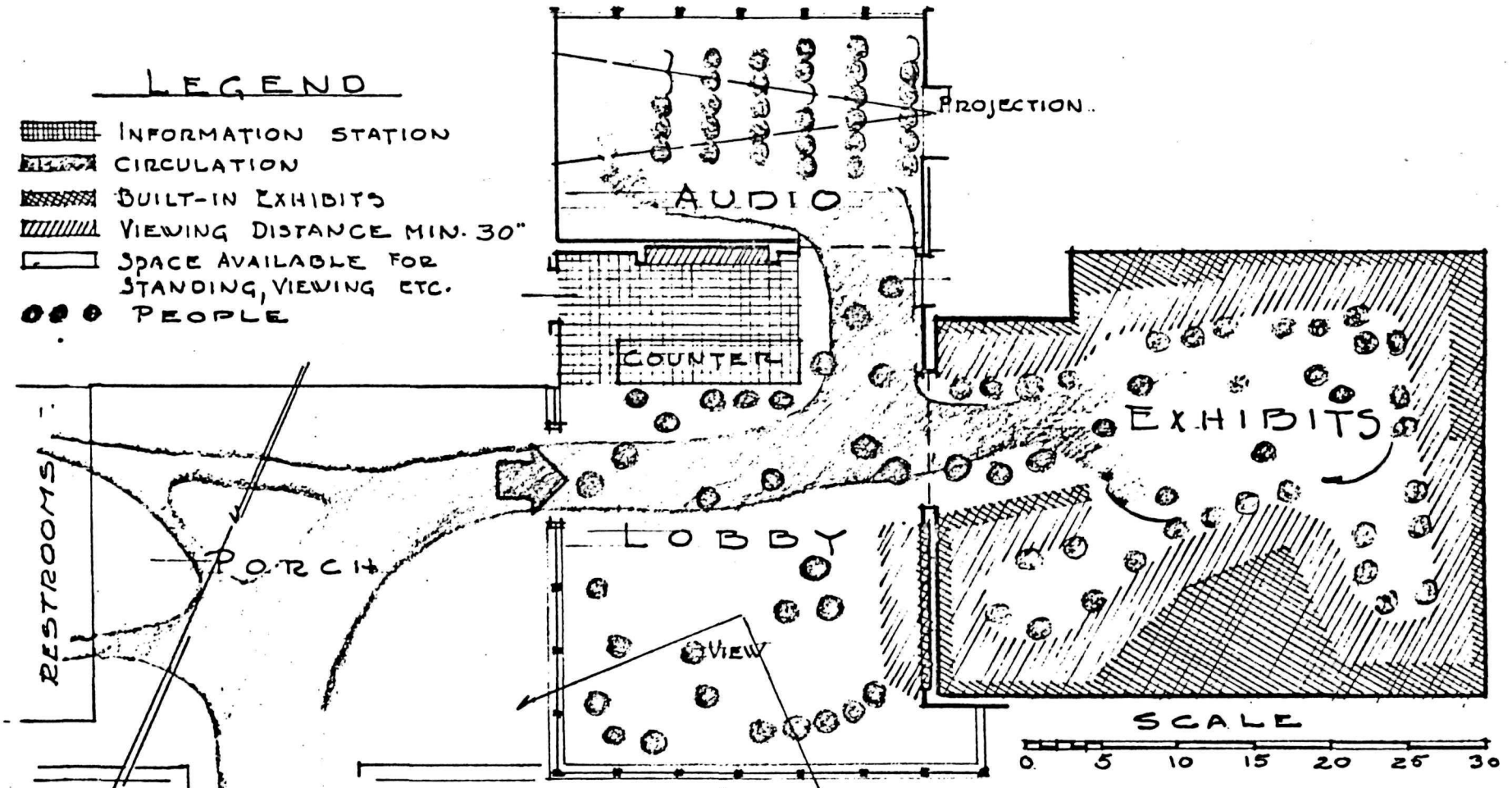
When a designer becomes concerned with a specific solution for a Visitor Center, he usually finds the placement has already been determined by the master plan and development outline. This placement may be without study of traffic flow; it may be the result of, rather than the objective of a parking area. This parking area design combined with site topography often dictates the shape and orientation of the Visitor Center. A compromise in circulation within the building may have to be made. This circulation, as well as the appearance of the Visitor Center becomes critical the moment the visitor leaves his car and approaches the building. The parking area, walks, terraces, and everything in and around the building are part of the Visitor Center ensemble, and are on exhibit as something constructed by the National Park Service. They can be more important than the exhibits themselves. The visitor is under no obligation to go farther, only his interest or curiosity will take him beyond the toilets or drinking fountain, and only interest or pleasure will keep him more than a few moments.

Proper handling of the parking, the approach walks, the shape of the building, fenestration, etc., should make the building useful to the majority of grown-up visitors. The basic circulation becomes evident before he (the visitor) enters the front door. The basic elements, such as toilets, exhibit rooms, auditorium and information counter become obvious upon entering the lobby without directional signs. Space should always be sufficient to keep these obvious. There is no flow diagram that can handle hundreds of people if space is not adequate. If the circulation is simple and obvious, and space is adequate, then clockwise, or counter-clockwise flow, locations of information counters, etc., become somewhat incidental.

I feel the greatest value in flow diagrams or traffic diagrams is in the earlier stages of planning, rather than on the architect's drafting board. If traffic flow can help correct programming faults by showing space is inadequate, it can help in fighting topography to achieve a preconceived interior arrangement. Traffic diagrams can alter or change the placement of the Visitor Center.

Visitation at "en route placements" may drop below 20% of potential, while "at a terminus placement" the visitation may reach 180%. The difference between 20% of the visitors staying 20 minutes, or 40% staying 40 minutes, means 400% difference in the number of persons to handle at peak moments.

Cecil J. Doty
Architect



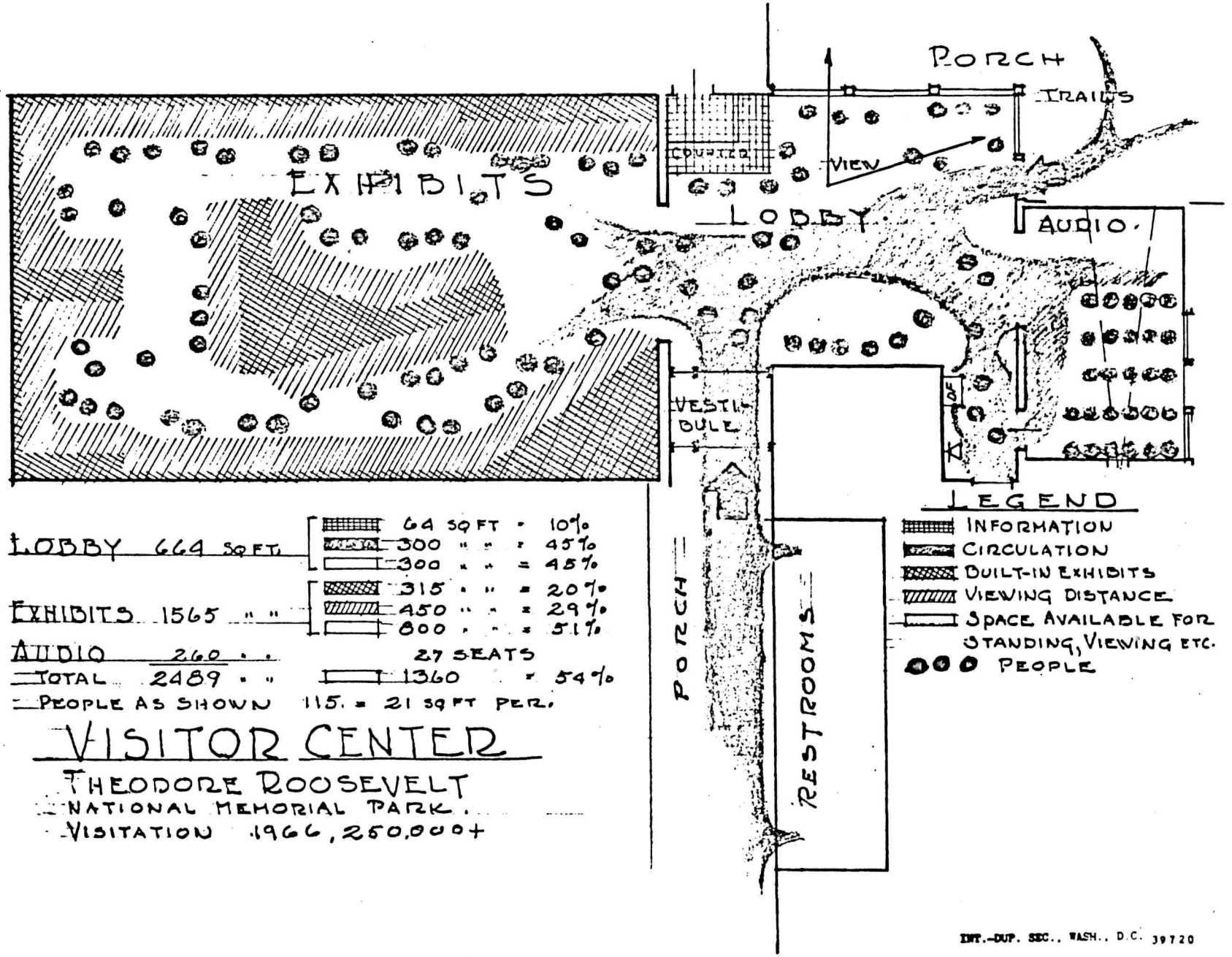
LOBBY	765 sq ft.	128 sq ft.	=	17%
		190 " "	=	25%
		447 " "	=	58%
EXHIBITS	976 sq ft	250 " "	=	26%
		250 " "	=	26%
		476 " "		48%
AUDIO	336 " "	33 SEATS		
TOTAL	2077	1280 sq ft	=	61%

PEOPLE SHOWN 100 = 20 sq. ft. per.

VISITOR CENTER

BADLANDS NATIONAL MONUMENT.

VISITATION 1966 = 1,250,000±



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