INTRODUCTION

The Fort Wayne Museum of Art opened in 1950 as an outgrowth of the School of Fine Arts. (The school is presently being merged with Indiana University - Fort Wayne). The present Museum, located in the former Mossman residence, 1202 West Wayne Street, has primarily functioned as a center for regional and local exhibitions in addition to housing a limited permanent collection. In the future, it is envisioned that the role of the F.W.M.A. will be expanded to include the extensive presentation of national traveling exhibitions.

Traditionally the role of art museums tended to be a showcase of art for the privileged. The concept of the museum of art as a static repository for conventional works of art to be viewed by a leisured and cultured elite is not acceptable or even practical for the Fort Wayne Museum of Art. On the contrary the role envisioned for the Fort Wayne Museum of Art is that of a community visual arts center, for the presentation of a variety of visual experiences (art events, exhibitions, workshops, seminars, etc.) which frequently involve direct viewer or audience participation. The museum seeks to respond to the needs of the community by offering vital educational services and a responsive variety of exhibitions and activities. The museum must also be able to respond to the burgeoning overlapping and inter-relationship of art forms and media. The Fort Wayne Museum of Art is striving to assume an ever more vital role in the rounding out of community cultural offerings.
The design of the Fort Wayne Museum of Art presents a tremendous opportunity to create a distinguished structure expressly designed in accordance with the museum's aims and projected activities. Because of the proximity of Louis Kahn's performing arts center the F.W.M.A. must be architecturally (and functionally) sympathetic to it and yet visually articulated so that the F.W.M.A. maintains an identity of its own. The building's character should be welcoming and express the vitality within. It is hoped that the design will act as an interaction stimulus between the activity within and pedestrians. It is hoped that the project will develop and reinforce a pedestrian link to the river.
The Museum will be located on a downtown site which is a part of Fort Wayne's fine arts complex. The location of the site is ideal for maximum interaction with the City. Being located near or adjacent to the Performing Arts Center, Freiman Square, the St. Joseph's river (and the future riverfront park), the C.B.D., excellent restaurants, government buildings, the Landing, the reconstruction of the original fort, presents the potential for the museum to become an integral component of a cultural network.

The site is just South of the St. Joseph's River and one of the finest restaurants, Halls Gas House, in Fort Wayne. Just to the West of the fine arts complex is the new City-County building. The site is just S.E. of a section of Fort Wayne called "The Landing" which is one of the oldest commercial areas in Fort Wayne. The area has recently been rehabilitated and has a tremendous amount of character and vitality. The Northern-most section of the main downtown shopping area is approximately 1 block to the Southwest of the site.

Currently the site is congested with a gravel parking lot. The new design for the F.W.M.A. must incorporate accommodations for 300 cars.

Future Expansion and Site Development
The siting of the project must take into account future expansion.
Climate

Precipitation

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean annual</td>
<td>32-48 in.</td>
</tr>
<tr>
<td>Max. rain in 1 hour</td>
<td>1.0-1.5 in.</td>
</tr>
<tr>
<td>Max. rain in 24 hours</td>
<td>2.5-3.0 in.</td>
</tr>
</tbody>
</table>

Snowfall

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean annual</td>
<td>16-32 in.</td>
</tr>
</tbody>
</table>

Humidity

<table>
<thead>
<tr>
<th>Month</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>70-80 %</td>
</tr>
<tr>
<td>April</td>
<td>50-60 %</td>
</tr>
<tr>
<td>July</td>
<td>70-80 %</td>
</tr>
<tr>
<td>October</td>
<td>50-60 %</td>
</tr>
</tbody>
</table>

Temperature

<table>
<thead>
<tr>
<th>Month</th>
<th>Avg. temp.</th>
<th>Ext. high</th>
<th>Ext. low</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>20-30 Deg.</td>
<td>100 Deg.</td>
<td>-20 Deg.</td>
</tr>
<tr>
<td>April</td>
<td>50-60 Deg.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>70-80 Deg.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>October</td>
<td>50-60 Deg.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Winds

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. expected winds</td>
<td>80-90 mph</td>
</tr>
<tr>
<td>Seasonal winds</td>
<td></td>
</tr>
<tr>
<td>January Eastward</td>
<td>3 mph</td>
</tr>
<tr>
<td>April Northeastward</td>
<td>3-4 mph</td>
</tr>
<tr>
<td>July North-Northeast</td>
<td>5-8 mph</td>
</tr>
<tr>
<td>October Eastwardly</td>
<td>6-9 mph</td>
</tr>
<tr>
<td>Seasonal</td>
<td>Azimuth</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------</td>
</tr>
<tr>
<td>December</td>
<td>121 deg. - 180 deg.</td>
</tr>
<tr>
<td>March</td>
<td>90 deg. - 180 deg.</td>
</tr>
<tr>
<td>June</td>
<td>59 deg. - 180 deg.</td>
</tr>
<tr>
<td>September</td>
<td>90 deg. - 180 deg.</td>
</tr>
</tbody>
</table>
Site Photographs
I. Galleries
   A. Flexible Exhibition Galleries  15,000
   B. Permanent Collection Galleries  4,200
   C. Prints and Drawings Gallery  800
   D. Art Sales and Rental Gallery  2,000
   E. Two Study Galleries (500 each)  1,000
   F. Special Storage for Study Gallery  400
   G. Future Galleries

   **Total:** 23,400

II. Educational
   A. Arts Forum (Auditorium)  5,000
   B. Studios  4,000
   C. Workshops  1,000
   D. Seminar Rooms  1,000

   **Total:** 11,000
III. Storage of Art Objects
A. Painting and Sculpture 4,000
B. Prints and Drawings 1,000
C. Temporary and Miscellaneous 1,000
6,000

IV. Work Areas
A. Registrar's Office 200
B. Registrar's Storage 600
C. Superintendent's Office 150
D. Carpenter and Paint Shops 1,400
E. Crate and Display Storage 1,800
F. Matting Shop 250
G. Loading Dock and Shipping Room 600
H. Conservation Laboratory 600
I. Photographic Laboratory 300
J. Darkroom, Negative and Print Storage 200
6,100
6,100
V. Administration

| A. Secretary's Office                     | 150 |
| B. Fine Arts Institute Secretary's Office| 150 |
| C. Director's Office                      | 400 |
| D. Assistant to the Director's Office     | 200 |
| E. Administrative Secretary's Office      | 200 |
| F. Curator's Office                       | 300 |
| G. Curator's Office                       | 200 |
| H. Registrar's Office                     | 150 |
| I. Library                                | 800 |
| J. Supply Room                            | 300 |
| K. Designer's Office                      | 150 |
| L. Volunteer's Work Area                  | 250 |
|                                               | 3,250 |

VI. Social

| A. Restaurant                             | 2,000 |
| B. Kitchen                                | 200  |
| C. Board Room/Members Lounge              | 1,600 |
D. Staff Room  
E. Lounges (Two)  
F. Museum Shop

\[
\begin{align*}
\text{D. Staff Room} & \quad 300 \\
\text{E. Lounges (Two)} & \quad 1,250 \\
\text{F. Museum Shop} & \quad \frac{1,250}{6,500} \\
\hline
\text{TOTAL NET AREA:} & \quad 6,600 \\
\end{align*}
\]

VII. Estimate of building service area, lobby, circulation elevator, toilets, walls, mechanical equipment, etc. (30% of gross area)  

\[
\begin{align*}
\text{VII. Estimate of building service area, lobby, circulation elevator, toilets, walls, mechanical equipment, etc.} & \quad 16,905 \\
\hline
\text{TOTAL GROSS AREA:} & \quad 73,255 \\
\end{align*}
\]
I. GALLERIES

Spaces, forms, textures, colors should form a neutral or supportive background for the works of art and the activity within.

The reader should refer to the functional relationship diagram for general circulation flow requirements. (See p.41.)

For security reasons there should be very few public entrances to the gallery section of the museum, yet the feeling of an easy traffic flow should be maintained everywhere. Temperature and humidity control is essential in all areas, and special materials to cut ultraviolet radiation must be used wherever daylight enters the building.

The museum must be able to perform its functions effectively with a small staff. It is therefore essential that storage areas, workshops, and other service areas be accessible and properly related to one another. Movement of both people and works of art through the building must be carefully planned, and the loading dock, doorways, elevators and corridors must be ample in width and height for the handling of large works of art.
A. Flexible Exhibition Galleries

The present F.W.M.A. has primarily functioned as an exhibition center. In the future it is envisioned that it will devote itself extensively to presenting traveling (and also local) exhibitions.

It is abundantly clear that this gallery must be highly flexible. This flexibility is also necessary so that the F.W.M.A. can accommodate various activities or experimental exhibitions which might run at the same time of a major travelling show. Or perhaps the activity might occupy all of the flexible gallery space.

It is expected that these galleries will attract the largest number of visitors to the museum, so they should be easily accessible from the front entry. It is desirable that these spaces be designed so that activities or exhibitions could at times "spill out" into an adjacent courtyard. Every effort should be made to facilitate the transportation of large works of art and installation materials from storage and workshop areas to these galleries. A 16' ceiling is desirable.

B. Permanent Collection Galleries

The museum has a somewhat limited, diverse permanent collection. The overall feeling in the permanent collection galleries should be conducive to the comfortable contemplation of works of art. There is no need in this area for an anonymous quality; it can have, rather, architectural distinction and a specific character. 12' ceilings would be appropriate.
Provide:
- Openings to exterior views and courts for visual change of forms
- The means to shut off galleries a few times a year for exhibit changes, if possible
- A small amount of flexibility so spaces or surfaces can be adjusted
- Some smaller circulation spaces having display cases easily accessible for arranging and lighting. Cases should be built-in.

C. Prints and Drawings Gallery 800 sq. ft.
Since the graphic arts provide a useful method of studying the arts of past and present, a print display and adequate storage is included in the program. The character of this space should be quiet and intimate, divided into two galleries. A 10' ceiling height would be sufficient.

This gallery should be designed so as to anticipate frequent exhibit changes. Both a display method and means to close off the space should be provided to that end.

This gallery should be adjacent to the print and drawing storage room.

D. Art Sales and Rental Gallery 2,000 sq. ft.
Artists from all over the Midwest bring their work to the F.W.M.A. to display and sell in this gallery. The museum has this program as a service to the artists and the general public. It is
also an important source of revenue for the Fort Wayne Museum of Art. This space should be adjacent to the bookshop and sales area which is in the proximity of the entry. It should be a browseable flexible space with a 10' ceiling height. This gallery will also need its own storage.

E. Two Study Galleries 1,000 sq. ft.

Eight to twelve shows a year geared to specific seminars and/or university courses will be located in study galleries consisting of two separate rooms designed for intensive examination of a small number of works. Usually these galleries will be open to the public, but it should be possible to close them off so that the noise of a seminar discussion doesn't distract visitors to other galleries. The atmosphere in these rooms should be conducive to pleasurable and effective study for considerable lengths of time. There should be no sense of confinement, but also no overly distracting views. Daylight is permissible if screened from U.V. radiation. 10' ceilings are fine here.

F. Two Study Galleries Special Storage 400 sq. ft.

Attached to each study area will be a space of 200 sq. ft. which serve as a backstage area. Here material to be exhibited will be stored and also seating tables, etc.

G. Future Galleries

It is hoped that the museum will continue to grow as it becomes more established. Therefore the
designer must provide in this project suitable capability for additions that will work easily with the initial project.

II. EDUCATIONAL

Goal: Fostering a more than superficial appreciation of art, not just instruction in the making of art.

The traditionally primary activities of the Fort Wayne Museum of Art - A commitment to the showing of varied and exciting exhibitions, as well as the preservation and display of its limited collection - can only be justified and made meaningful through educational programs in the coming years. The purpose of all the educational programs should be to enhance the public's abilities to see and comprehend by making the significance of works of art clearer and their enjoyment a more attainable pleasure. Unfortunately this is not an easy goal. This goal can best be met by seminars, workshops, exhibitions which involve direct viewer participation, and other innovative ways for the viewer to truly experience works of art.

A. Arts Forum

An "Arts Forum" rather than a conventional auditorium, seating up to 400 people, is vital for nearly all museum programs. Past and present F.W.M.A. programs have proven the need for an adequate space for the presentation of lecture and film series, small concerts, multi-media shows, multi-art media audience participation performances, conventional performing arts programs, panel discussions, and general meetings. It is hoped that perhaps educational TV shows could also be filmed here. This space might even
possibly not include any fixed seating. It could be circular in form with amphitheatre-like carpeted steps, or some other solution for static seating problems. The Arts Forum should have an open center, an adjacent stage (possibly convertible to a television and film studio) and an ample projection booth.

B. Studios

In order to implement adequate instruction programs in various arts media, a highly flexible studio arrangement is needed. Classes for both children and adults will include introductory instruction in drawing, design, painting, sculpture, etc. The intent is not to duplicate existing programs in the community, but to place a great emphasis on the development of art appreciation through the learning of techniques only, rather than through elaborate instruction in advanced classes.
III. STORAGE OF ART OBJECTS

A. Painting and Sculpture

This space subdivides into:

1. Active painting storage 1,200 sq. ft.
2. Active sculpture storage 1,200 sq. ft.
3. Passive painting storage 800 sq. ft.
4. Passive sculpture storage 800 sq. ft.

The active storage must be very available to the galleries so works can be readily moved in and out. Items in active storage must be easily viewable for exhibit planning. Painting storage racks must be quite accessible, and paintings must be easily withdrawn for consideration. Sculpture pieces must be similarly available.

Passive storage need not be so readily available; storage can be more compact.

Provisions must be made in the building for the moving of both large and heavy works from storage to gallery and back. Corridor ceilings and doors en route should be at least 12' high and a vertical lift should be provided that is both large enough and strong enough to carry about two tons. This could be a regular elevator, or perhaps another kind of lift -- possibly through a removable floor.

B. Prints and Drawings Storage

This space is to be adjacent to the Prints and Drawing Gallery and will be accessible (by appointment) to the public. Provide large flat tables for study.
The prints and drawings curator's office will be within this space, a partitioned-off work space area. A 10' ceiling would be ample.

C. **Temporary and Miscellaneous** 1,500 sq. ft.

This space will be primarily a staging area for the Flexible Exhibition Galleries.

This space should be handy to both the loading and shipping area and the Flexible Exhibition Galleries.

**IV. WORK AREAS**

A. **Registrar's Office** 200 sq. ft.

This office adjacent to the loading and shipping area is the controlling check point for all material entering and leaving the museum. The space will have a desk, and chair, a side chair, reference table and book shelves. It will contain a bank of registration files (10 drawer card files -- duplicated in other registrar's offices). It should be adjacent to the shipping area.

B. **Registrar's Storage** 600 sq. ft.

This space houses objects moving in and out or in the process of registration. It should be adjacent to the Registrar's Office and Shipping area. Provide high door openings, racks and shelving.
H. Conservation Laboratory 600 sq. ft.

Basically, this lab is used for infra-red inspection, X-ray examination, retouching, fumigation, de-foxing, cleaning, etc. Provide a table and shelf for paint and materials. It should be located near the Registrar's office and Registrar's Storage Area.

I. Photographic Laboratory 300 sq. ft.

This windowless area will be used for photographing paintings and art work. It will contain an 8 x 10 negative camera, moveable flood lights and tables of various heights. The room should be a long rectangle with about 10' of ceiling height. It should be located near the Registrar's area.

J. Dark Room, Negatives and Print Storage 200 sq. ft.

a. Dark Room: Provide space for enlarger, dryer, sink, storage and work top, for use by one person. It should be placed near the photo lab.

b. Negative and Photo-print Storage: Provide space for standard letter size filing cabinets for storage with a large work table in the center of the room.

V. ADMINISTRATION

In general this area should be grouped for efficiency of inner office circulation. It should be organized so that visitors come to a real point of entry where they can be met and directed to the proper office. The secretary and institute's secretary should be pooled so that they may share receptionist responsibilities.
The administrative group should have close proximity to the work areas group. It should also be easily available from the lobby desk area. It should be a pleasant area taking advantage of exterior views.

A. Secretary
   150 sq. ft.
   This is a general secretary who will also serve as a receptionist for this group.

B. Fine Arts Institute Secretary's Office
   150 sq. ft.
   This person will handle the secretarial work for the fine arts institute. Responsibilities will also include the handling of membership business, general secretarial work and office storage should be provided.

C. Director's Office
   400 sq. ft.
   In addition to normal office furniture, provide a reference-conference table. This office should be accessible to the public through the administrative secretarial area and be adjacent to the administrative secretary.

D. Assistant to the Director
   200 sq. ft.
   This will be a less public office - more a "working" office. A work table and reference shelves will be provided. This person is a professional.
E. **Administrative Secretary's Office**
   200 sq. ft.
   This person assists the Director in non-professional administrative work. The general correspondence files are located here.

F. **Curator's Office**
   300 sq. ft.
   In this space provide a table and reference shelving, as well as a desk, chair, etc. It should be close to the library.

G. **Curator's Office**
   200 sq. ft.
   In this space provide a table and reference shelving, as well as a desk, chair, etc. It should be close to the library.

H. **Registrar's Office**
   150 sq. ft.
   This office will have files duplicating those in the Registrar's office by the shipping area.

I. **Library**
   800 sq. ft.
   This is a reference library for the staff with stacks in one end and a reading table at the other. This room will serve as an auxiliary meeting room. The stacks are to house 3000 volumes. One end should be screened off for conferences.
J. Supply Room

This space will house office supplies, duplicating machines, etc. Provide a work counter, storage cabinet, etc.

K. Designer's Office

This will be a drafting and design area for the exhibit layout designer.

L. Volunteers' Work Area

Three desks and work spaces will be provided here for three volunteers to work and to keep their things.

VI. SOCIAL

A. Restaurant

The museum must incorporate a modest facility for the serving of a limited luncheon menu and a service area for the catering of museum social functions as well. It should be located as to give an attractive view of the court/outdoor gallery. If possible, it would be desirable for the restaurant to be open when the museum is closed.

B. Kitchen

Besides serving the restaurant, the kitchen will function as a catering center for museum functions such as exhibition receptions in the major exhibit galleries, and for luncheons in the
meeting room, etc. It should be accessible from the loading dock.

C. Conference Room & Members' Lounge  
1,600 sq. ft.

This is a very well appointed room where special meetings can take place. At other times, it would be available to museum patrons for relaxation and as a smoking lounge. The room should have a very good view to the exterior, preferably over an outdoor sculpture court toward a view beyond. It should be equipped for visual aids presentations, but should have the character of an executive lounge rather than a lecture room. This room should be accessible when the museum is closed.

D. Staff Room  
300 sq. ft.

This room should be accessible to administration areas and will serve for staff meetings, conferences, lounge, etc. Provide for water, sink, stove, and refrigerator.
C. Superintendent's Office

The building superintendent will manage custodial operations from this space. It should be convenient to the Registrar's office.

D. Carpenter and Paint Shops

This shop will be used for making up exhibits for the flexible exhibition galleries, primary, and also other galleries work. The strongest relationship is therefore to the Flexible Exhibition Galleries.

10' ceilings should be provided for. A small washroom, locker and toilet should be provided here or close by.

1. Carpenter Shop

This area will be used for build display equipment, pedestals, storage cases, packing cases, special installation devices, etc. Provide space for power tools, e.g., table saw, band saw, sander, drill press, etc., as well as separate space for work benches, lumber storage and miscellaneous small tools.

2. Paint Shop

This space should contain provisions for the storage of paint as well as work space. An exhaust system is required.
3. Shop for Clean Work

Dust free, clean space for framing oil paintings, custom glass cutting, etc. This space must be suitable for handling original oil paintings and other works of art.

E. Crate and Display Storage

Accessibility to the loading dock and shipping room, museum galleries, and carpenter and paint shop is important. As exhibits arrive at the gallery, they are uncrated -- the crates are to be stored here during the exhibit.

F. Matting Shop

This shop is to be a separate space for "clean" operations, i.e., custom mat cutting for every print and drawing (some irreplaceable, many rare and very valuable) added to the collection. It should be adjacent to the print and drawing storage room. Provide large areas of flat table space.

G. Loading Dock and Shipping Room

This room is used for handling, opening, and packing of large crates. It should be adjacent to Registrar, Registrar's Storage, and also crate storage. The exterior dock area should be well protected from the weather so that trucks can unload relatively protected from blowing snow or rain. Trucks may load from the side as well as the end. Provide an automatic dock levelling device.
A. Environmental Conditioning

The museum must be fully air conditioned to control temperature and relative humidity levels, dust particles, fumes, and prevention of fungi. The system to be designed, as must as practical to provide one constant level of temperature and humidity in areas housing art objects, and perhaps another more suited to human occupancy in areas primarily for people.

A constant level selected within this range is:

For Art: RN 45% to 60%
Temp 65 Deg. to 72 Deg. F.

Recommended levels for people: RH 55%

Summer: T 72 Deg.
Winter: RH 45%
T 68%

B. Lighting and Daylight Control Where Art Work Is Housed

The following information is taken from pages 53 and 54 of Keck - A Primer on Museum Security

Ultra-violet, the Damaging Factor
Although strictly speaking all wave lengths of light can cause photo-chemical damage, it is the ultra-violet and bluish portion of light that is photochemically most active. The museum objects most likely to be affected by this damaging force are those which contain fugitive pigments, dyes, or inks; textiles of all types; leather, animal skins, feathers, paintings—especially watercolors; books, manuscripts, drawings, and paper. Certain woods tend to become darkened, and wood stained with dyes can fade. Some pigments in pastels are fugitive. The fading or yellowing of the vehicle in paints and varnishes can also lead to surface erosion and changes in solubility.
Characteristics of Light

Daylight is not constant. It varies considerably depending on the angle of the sun, the conditions of the atmosphere, and the degree of scattering from clouds or dust particles. We judge artificial light in terms of the characteristics of natural light. When the different types of light are compared from the photochemical point of view—all at the same relative energy levels—we find that activity increases from incandescent light, which is less damaging than sunlight, which is less damaging than pure ultra-violet. If a light-sensitive object is exposed to illumination for a given period of time, the greatest changes, therefore, will occur under pure ultra-violet and the least changes under incandescent light.

Color Temperature

Figure 2 is a table of factors of probable rate of damage from listed light sources with given color temperatures. Every form of science requires standards of measurement and comparison. The concept of "color temperature" is based on the characteristics of radiant energy from a "black body radiator". Such a "radiator" may be the window of a furnace. As the temperature is gradually raised, the color perceived passes from dull red to brighter red, and finally through yellow to a pale, brilliant blue at the highest temperatures. At each temperature, the "black body radiator" emits light of a different wavelength distribution. It is from this analogy of color and heat that our tables of light characteristics, e.g., color temperatures, are compiled.
<table>
<thead>
<tr>
<th>Source</th>
<th>Rated Color Temperature, °K</th>
<th>D/FC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zenith Sky, through window glass</td>
<td>11,000</td>
<td>1.58</td>
</tr>
<tr>
<td>Overcast Sky, through window glass</td>
<td>6,400</td>
<td>.682</td>
</tr>
<tr>
<td>Cool-White Deluxe Fluorescent</td>
<td>4,300</td>
<td>.554</td>
</tr>
<tr>
<td>Warm-White Deluxe Fluorescent</td>
<td>2,900</td>
<td>.444</td>
</tr>
<tr>
<td>Sun at 30 Deg. Altitude, through window glass</td>
<td>5,300</td>
<td>.427</td>
</tr>
<tr>
<td>Daylight Fluorescent</td>
<td>6,500</td>
<td>.402</td>
</tr>
<tr>
<td>Overcast Sky through Plexiglas UR-1</td>
<td>---</td>
<td>.243</td>
</tr>
<tr>
<td>Philips Fluorescent Lamp 34 (1955)*</td>
<td>---</td>
<td>.210</td>
</tr>
<tr>
<td>Overcast Sky through Plexiglas G911B**</td>
<td>---</td>
<td>.159</td>
</tr>
<tr>
<td>Incandescent Lamp</td>
<td>2,854</td>
<td>.138</td>
</tr>
<tr>
<td>Philips Fluorescent Lamp 32*</td>
<td>---</td>
<td>.096</td>
</tr>
</tbody>
</table>

*J.J. Balder (from R.L. Feller)
**L.S. Harrison

Fig. 2 Factors of Probable Rate of Damage per Footcandle (D/FC) and Approximate Color Temperature for Various Light Sources.
For instance, tungsten filament—incandescent lamps—give a yellowish warm light, low in ultra-violet and with a distribution of energy similar to yellow heat at 2400 deg. to 3000 deg. Kelvin. (Kelvin temperature, OK, is a term of measurement equal to Centigrade temperature plus 273 degrees.) An overcast sky is said to have a color temperature between 5000 and 7000 deg. K. North light—preferred by artists—has a color temperature in the neighborhood of 6000 deg. K, with nearly an equal amount of red and blue energy. After discussion of intensities and color temperatures, specialists advise that museums make an effective compromise of around 4500 deg. K in their lighting.

The control of illumination can be in two directions, either to alter the spectral quality of the light source—eliminating the ultra-violet or near ultra-violet output—or by minimizing the intensity of light striking a surface; or by a judicious combination of both these safeguards.

Usually spectral characteristics of light can be controlled by means of special filters. The intensity of daylight may be diminished by manually or electronically operated shades, louver, and curtains. Diffusing surfaces, materials, and glasses serve to reduce intensity. Reductions can be effected by the use of neutral gray glass such as Pittsburgh Plate Glass "Solargray" or the American Window Glass "Lustragray". Plate glass that reflects radiation because of a thin deposit of metal is also available: Pittsburgh Plate Glass "LHR Twindow" and "LHR Solargray Twindow". Where fluorescent lamps are used, acrylic filters designed as UF-1 and UF-3 can effectively cut out the ultra-violet component without appreciably altering the rest of the spectrum. Plexiglas UF-1 is practically colorless; Plexiglas UF-3 is slightly yellow. Choose the filtering method compatible with your display and your budget.

C. Security

Circulation must be controlled so that visitors must pass in full view of the lobby desk.

Coats, hats, packages, umbrellas, etc., should be restricted to the coat room, ideally. This should be convenient, if not mandatory.

Alarm system possibly with closed circuit TV should be provided.
Exterior design must prevent ingress or vandalism as much as possible. Night lighting should be provided.

D. Circulation & Design Considerations For the Handicapped

The facility must be designed and detailed so that the museum's spaces and facilities are accessible throughout by handicapped individuals, notably wheel chairs.

E. Fire Safety

In addition to following the applicable codes, the designer must work out appropriate fire fighting equipment and alarms for various spaces. The type of fire extinguishers, and sprinklers, if any, will vary according to content of the space.
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<th>Direct</th>
<th>Indirect</th>
<th>Conflicting</th>
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<td>Flexible exhibition</td>
<td>permanent collection</td>
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<td>Galleries</td>
<td>Special storage for study gal.</td>
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<td>Art sales &amp; rental</td>
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<td>Painting and sculpture</td>
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<td>Temp. and misc.</td>
<td>Staff room</td>
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<td>Museum shop</td>
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<td>Restaurant</td>
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<tr>
<td>Kitchen</td>
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<td>Board room/members lounge</td>
<td>temporary and misc.</td>
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Relationship Matrix
Schematic Circulation and Functional Relationships
- Induces pedestrian and vehicular interaction with the site and facility
- Outdoor amphitheater terminates pedestrian axis
- Respects Kahn's "court of entrances" master plan concept
- Makes the facility easily accessible from pedestrian and vehicular nodes
- Future Philharmonic Hall would be in an unfavorable siting in relation to the elevated rail
DEVELOPES A STRONG LINK TO THE RIVER AND FUTURE RIVER FRONT GREEN SPACE

MINIMIZES CONFLICT OF STUDENTS & GENERAL PUBLIC

RESPECTS KAHN'S "COURT OF ENTRANCES" MASTER PLAN CONCEPT

SECURITY IS SOMEWHAT SIMPLIFIED

FACILITY OPENS UP TO THE RIVER, ENCOURAGING MAN/NATURE INTERACTION

SOME PARKING, WHICH IS ALREADY IN VERY SHORT SUPPLY IS ELIMINATED

Concept Study 2
- Interacts with and develops a dialogue with the performing arts center
- Reinforces a pedestrian link to the river
- Respects Kahn's "courtyard" master plan concept
- Creates a semi-enclosed outdoor court which could become a space for activity to spill out into
- Minimizes parking and service roads by using existing
- Allows good visual access to Kahn's performing arts center

Concept Study 3
Schematic Study 1
Schematic Design
Schematic Model
Upper - levels
Lobby / Sculpture Court