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The Gallatin Valley Seed Company

Located in
Bozeman, Montana

By
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Montana State University
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Programming analysis submitted in partial fulfillment of the
requirements of the degree of
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in
Interior Design

Approved:

Clark Llewellyn, Advisor

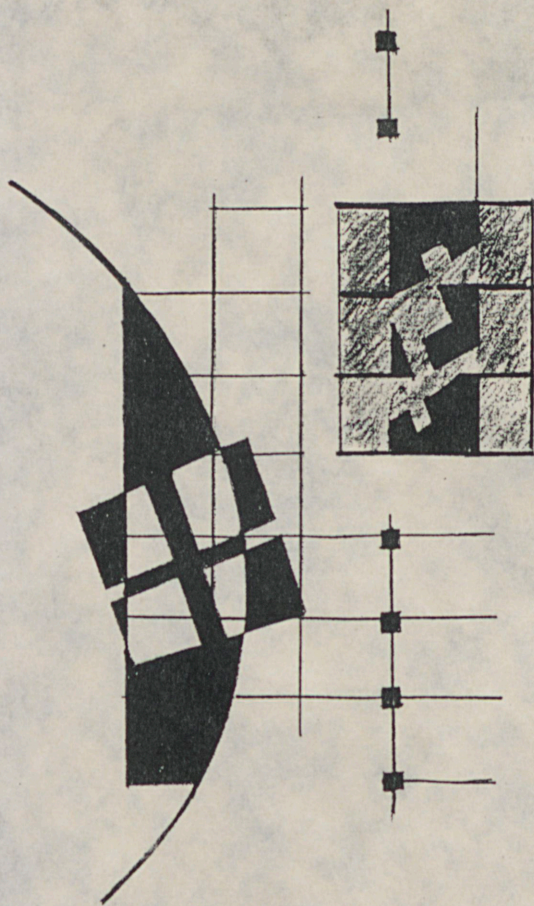
Tom Wood, Director, School of Architecture

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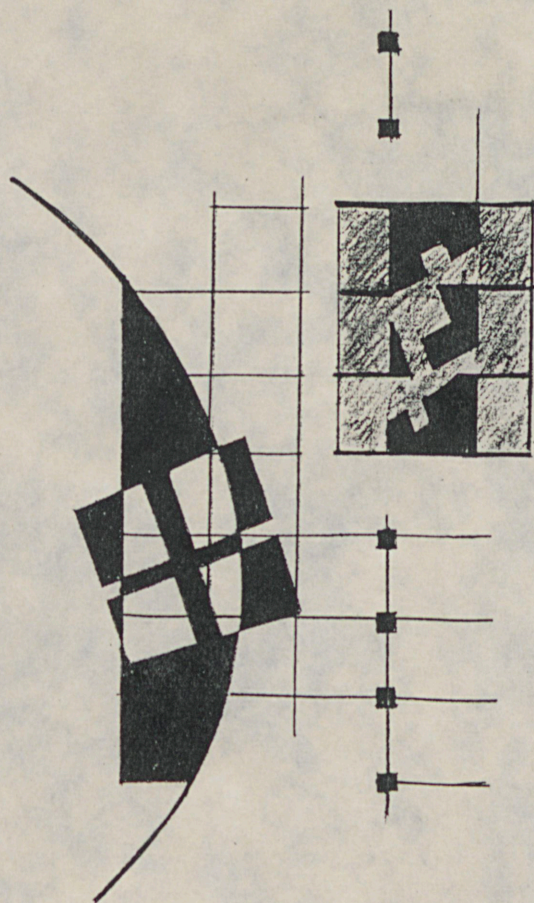
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INTRODUCTION

This project started as a desire to create a new place in Bozeman, Montana - a different place that provides live entertainment, gourmet food, and an exciting atmosphere. I wanted a project that was going to allow me to explore the use of space and light freely.

After deciding to do a restaurant of some kind, I went out looking for a building that interested me and that would suit my needs. I knew that I wanted an older building possibly in the industrial historic east side of Bozeman. The search was for one with a simple rectilinear shape and simple facade which would not restrict me to a certain style. After investigating several buildings in that area I decided on the Gallatin Valley Seed Company structure. The building first attracted my attention due to its rustic historic nature. Its simplistic shape fit my needs, and the size was perfect for my program requirements. I obtained the blue prints from a local architect who was in the process of renovating the site and began thinking about what would work in this space, and how it could be most successfully used.



HISTORY

The Gallatin Valley Seed Company complex is historically significant due to its association with a very important industry in the Gallatin Valley from the late 1910's through the 1940's. The seed pea industry in the Gallatin Valley got its start in 1911 when William A Davis, a representative of the Jerome G. Rice Seed Company of Detroit, made a pitch to the Bozeman Chamber of Commerce to urge members to raise peas for seed. The cool summers and the semi-arid, irrigated fields of the Gallatin Valley provided excellent growing conditions. Various strains of bacterial blight that commonly attack pea plants, passing from one plant to the next in the fields once the disease becomes established, forced eastern seed pea companies to depend upon opening up new areas to pea production. Davis encouraged farmers to put a total of 2500 acres into peas for his company, and twenty car loads of seed peas were shipped East after the first harvest. By 1913, three separate eastern based seed pea companies were in competition in Bozeman and the total pea acreage in Gallatin Valley rose to about 10,000 acres.

In 1912, William Davis split from the Rice Seed Company to open his own processing and shipping facility in Bozeman. He was successful in breeding a number of new pea varieties that were better suited to the Gallatin Valley growing conditions and climate and developed new markets in the midwest, especially in Wisconsin. Davis had the seed processing plant and warehouse built at 209 South Wallace by 1917. Davis' business prospered, and suddenly during the early 1920's, he disappeared with the profits, leaving the William A .Davis Seed

Company in financial disarray. The company was declared bankrupt in 1921 and was reorganized by Davis' former business partner Budge Parker, as the Gallatin Valley Seed Company on September 22, 1922. Also on the board of directors were John A. Lovelace, Hubert D. Bath, and Charles F. High.

The Gallatin Valley Seed Company furnished the area farmers with the seed for planting, research results, field advice and service, and equipment for harvesting. Seed peas were left on the vine to mature and dry out, and harvest generally began in mid-September. Approximately five hundred workers would be hired on at the processing plant from September to March to clean, sort, treat, and package a season's harvest.

By the late 1920's, the seed pea industry was at its peak in the Gallatin Valley, with at least six seed companies located in Bozeman, supplied by area farmers with peas from approximately 15,000 acres. In addition to the Gallatin Valley Seed Company, the following companies also had offices in Bozeman: Brotherton-Kirk Seed Company, Landreth Seed Company, and in 1928, the N. B. Keeney and Son Seed Company, Everett B. Clark Seed Company, and Allen Seed Company, merged to form the Associated Seed Company.

Due to the successful production of peas in the valley, a group of businessmen organized the Bozeman Canning Company in 1917, which processed potatoes in addition to peas. This cannery remained an important industry in the valley until its bankruptcy in 1962.

The blight that brought the seed pea industry to the Gallatin Valley during the early 1910's also drove it away to new fields further west. By the 1930's, Caterial Blight had been introduced into the fields. This seed borne disease lives in the soil and migrates into the plants through any lesions caused by blowing sand, high wind, beating rains or hail. The Associated Seed Company left Bozeman in 1948. The Gallatin Valley Seed Company absorbed the Brotherton-Kirk Seed Company in 1932 and remained in operation in Bozeman until 1961 in its facilities at 209 South Wallace.

The Gallatin Valley Seed Company complex is composed of the seed plant, two warehouses, and a smaller, detached garage. The central portion of the Seed

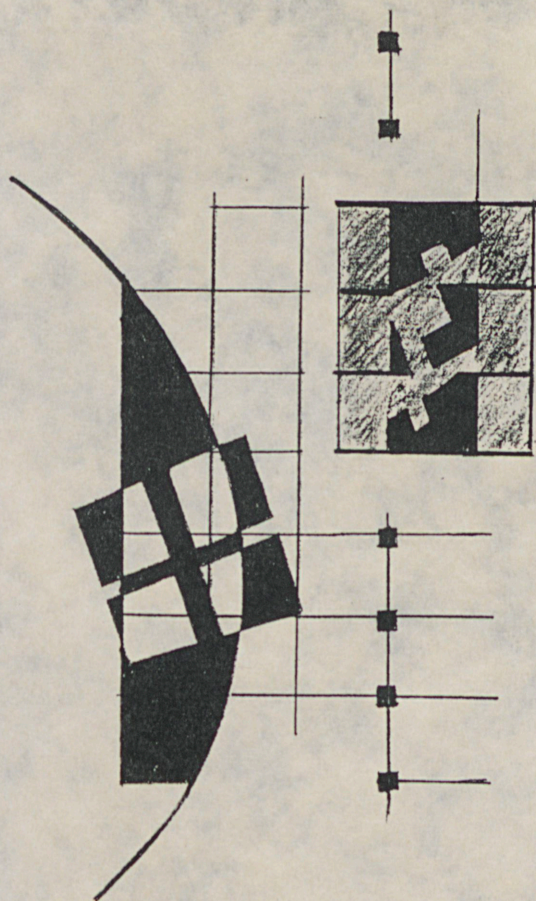
Company complex, built ca . 1917, is where the peas were cleaned and sorted. This large, rectangular, three story, wood frame building is covered with galvanized metal. The building's architectural design related directly to the building's function. The multiple machinery housings that project above the gently sloped gable roof cover the elevator equipment used in the gravity mill seed processing that occurred in the building.

Seed peas were brought into the plant at the first floor loading docks where they were weighed. Then, when ready to be sorted, the peas were hauled to the third floor in hoppers where fanning mills blew away the light peas and any left over vines from the field. Once the fanning was complete, the peas dropped through a chute to a conveyor belt on the second floor for hand sorting and any cracked, off color, and deformed seeds were removed. Once the sorting was complete, the seeds were chemically treated to ward off rot and wilt and then dyed red to prevent accidental human consumption. Then, the seed peas were dropped to the first floor where they were bagged and readied for shipment or storage in the adjacent warehouse. Seeds were shipped in burlap sacks or in 1200-1500 pound boxes.

Evenly spaced four-over-one double hung windows light the fanning mill operations on the third floor. Considerably more light was required on the second floor where the seeds were sorted and treated. There a continuous bank of four-over-four double hung windows extend along the length of the south elevation. Irregularly spaced four-over-four double hung windows are found on the first floor. Large concrete loading docks are located on the west, east, and south elevations. Large wooden sliding doors close off the loading platforms from the interior of the building. The building has a full concrete basement and a reinforced concrete floor on the first level. The only remaining interior features that pertain to the Gallatin Valley Seed Company operation is the elevator that serves all three stories, as well as the basement.

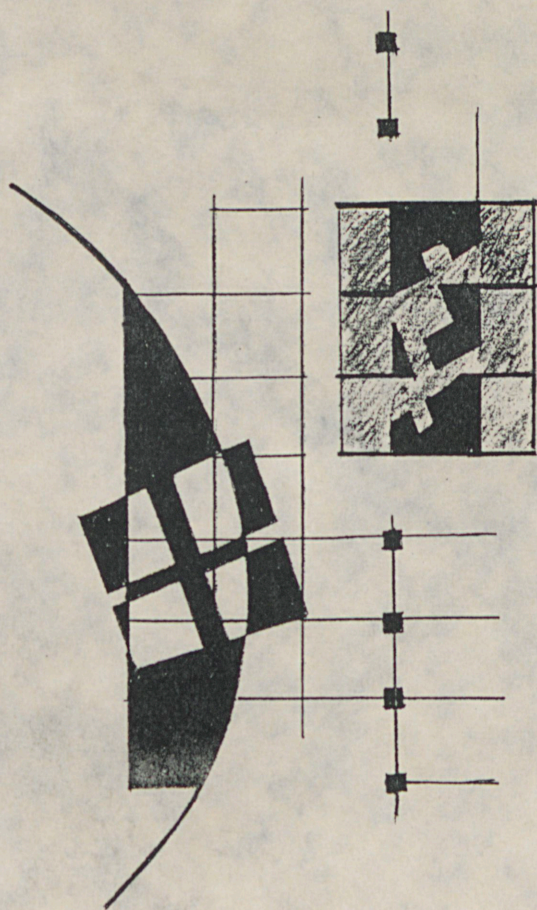
The large, one story, brick veneered warehouse, build ca. 1917, and located adjacent to the seed plant to the north also has a concrete basement and a reinforced concrete floor. The windows of the warehouse are evenly spaced, fixed, six-light units. There is one five panel door on the east facade. The roof is made of 2" x 4" lumber laid on end and supported by box trusses. This

warehouse is considered to be a contributing element of the complex. Another three story warehouse that originally was used for seed pea processing by the Everett B. Clark Seed Company is located across South Wallace Avenue from the Gallatin Valley Seed Company complex. The building has been sided in galvanized metal that has been painted blue and most of the windows have been replaced with larger single sheets of glass.



SITE ANALYSIS

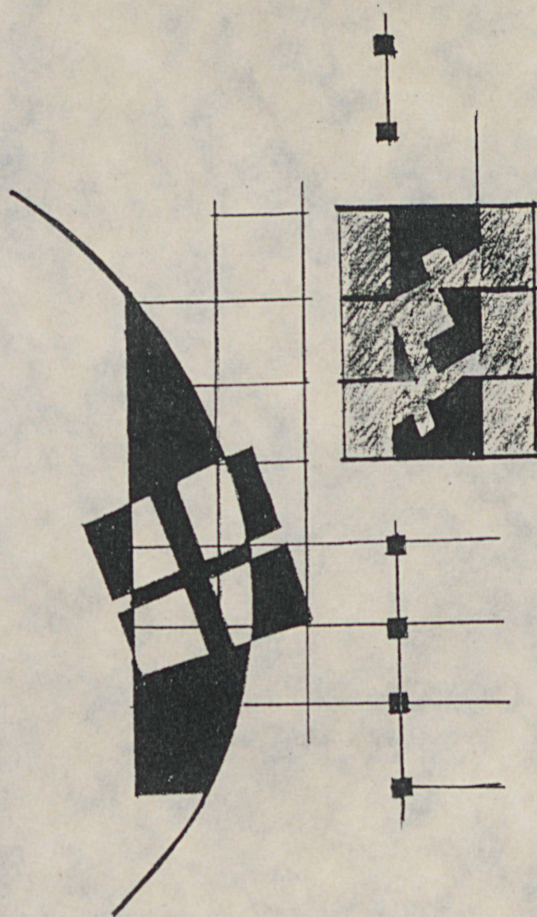
The Gallatin Valley Seed Company is located in the corner of East Olive Avenue and North Wallace Street in two blocks off Main Street in Bozeman, Montana. It is located in the industrial east side of historical Bozeman. There is an adequate amount of parking on the east side and west side of the building. Since parking is a major problem in Bozeman, this makes for an ideal location.



SCOPE

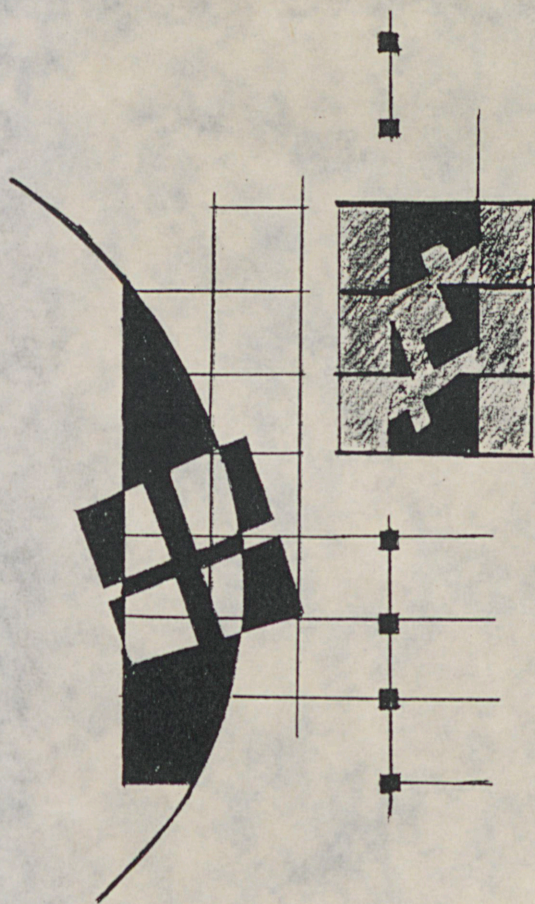
The main goal for this project was to create a place for artists to display and present their art, particularly a place to express four different kinds of art - paintings and sculpture of local artists, art of the theater, the art of music, and the culinary art - a place that combines all elements for Arts.

Bozeman has a very large artist community and also is in need of more cultural diversity. This project would provide a place for the artists to display their creations and also provide an exciting place for the public to enjoy sights, sounds and sensations.



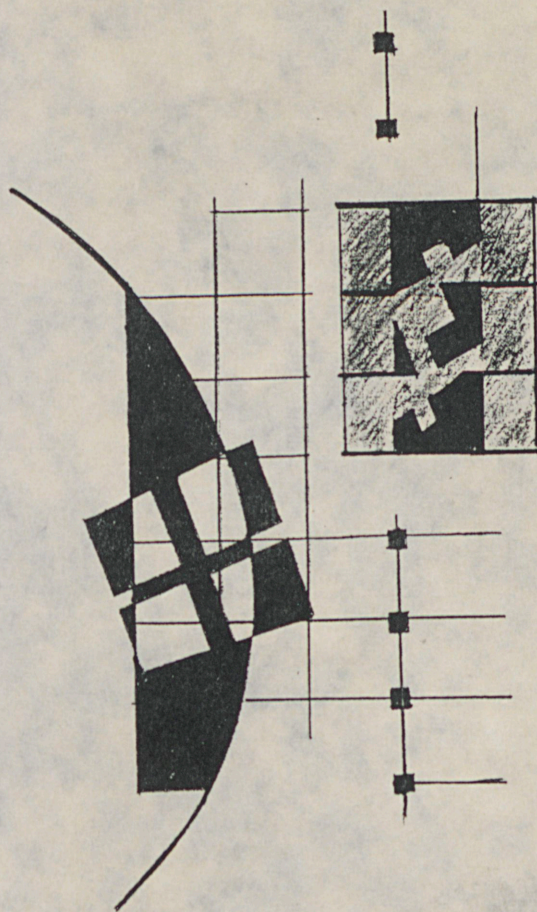
GOALS/ CONCEPTS

The main space will be mostly in the brick portion of the building on the right side, due mainly to the fact that it is a more pleasant space. Its rough brick surface, large wood trusses, and tall windows express a better spacial quality and a wonderful quality of natural light. The secondary space will be in the left half of the building . There will have to be an element in the design to combine the two spaces and create a balance between them. It is a design goal for these two building to be perceived on the interior as one and to integrate them.



PROGRAM

Entry	400s.f.
Bar	800s.f.
Dining Downstairs	1500s.f.
Dining Upstairs	1000s.f.
Stage	1000s.f.
Backstage(dressing room)	875s.f.
Lounge	1500s.f.
Secondary Bar (espresso)	250s.f.
Kitchen	
Preparation/Cooking	900s.f.
Cold Storage	200s.f.
Dish Room	200s.f.
Dry Storage	250s.f.
Banquet Dining	1800s.f.
Secondary Kitchen	500s.f.
Secondary Bar	200s.f.
Restrooms	
Womens(2)	700s.f.
Mens(2)	550s.f.
Total	12625s.f.



SPACE ANALYSIS

Entry/Reception Area

The reception area consists primarily of a host station which has a main function of guiding guests to their seats and of giving information about the restaurant or any art work which can be purchased.

Bar

The bar is a secondary dining and socializing area for guests waiting for a table. It functions as a main part of the dining system but is a more casual area for people who do not wish to dine.

Dining

The main tables will be able to view the stage as a production is going on and there will be "box seats" provided for a more intimate dinner theater experience. The secondary tables are for those not wishing to view the production and are only having dinner. These tables will be set back away from the main space for a quieter dining experience.

Stage

The stage will be a raised permanent platform, approximately one thousand square feet in size. It will be in a location that is most logically defined for optimum viewing.

Back Stage/Dressing Rooms

The back stage area will provide spaces for actors to change in and out of costumes in private if necessary. The space will also provide ample mirror space for applying makeup. It will include a sink and separate entrances to bath rooms.

Lounge

The lounge will provide a secondary bar, including espresso drinks for guests that have finished their meals. The space will contain sofas and arm chairs for maximum comfort and relaxation. It will be a space used to get away from the "action",

Kitchen

The kitchen shall be an exhibition space where guests can view their dinners being prepared and witness the excitement and amusement that a kitchen can bring into a space.

This area shall have ample storage space and preparation space and a separate exit to allow deliveries without disrupting other activity and traffic.

The banquet dining space shall be a private dining area for large parties wanting separate facilities. This shall provide a separated secondary kitchen supplied by a dumb waiter. There shall also be a separate bar to supply banquet activities.

Restrooms

Downstairs and upstairs restrooms are alike.

The men's facilities shall have three water closets each with one being accessible, and six urinals and three lavatories in each one.

The women's restrooms shall each have six water closets, with one being accessible and six lavatories.

Office Space

Office areas shall be provided for managerial purposes.

Gallery Space

As one enters the building there will be gallery spaces. Other areas will be left for designated specific art functions.

Elevator

Equal accessibility will be obtained by providing an elevator for vertical transportation between floors.

Technicians Room

This space shall be large enough for at least two people and the necessary equipment.

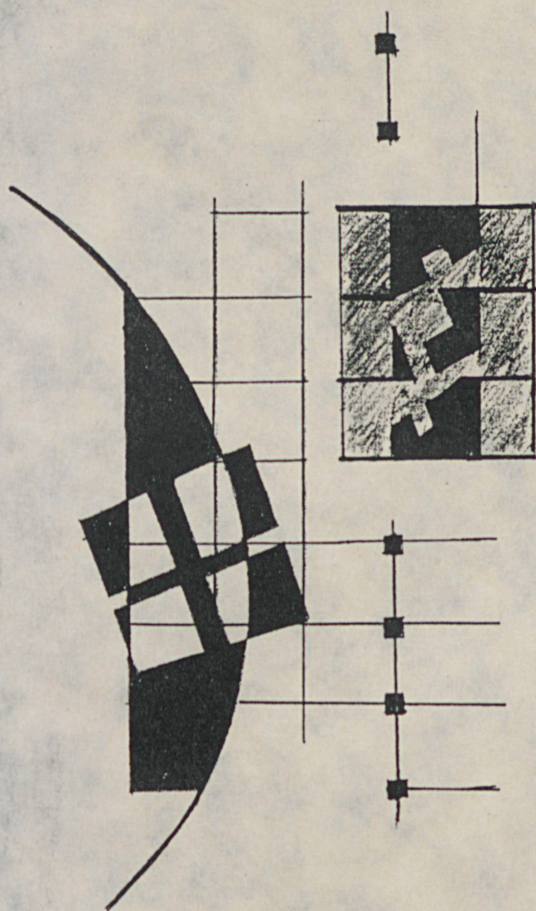
The Secretary of the Interior's Standards for Rehabilitation

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other building, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

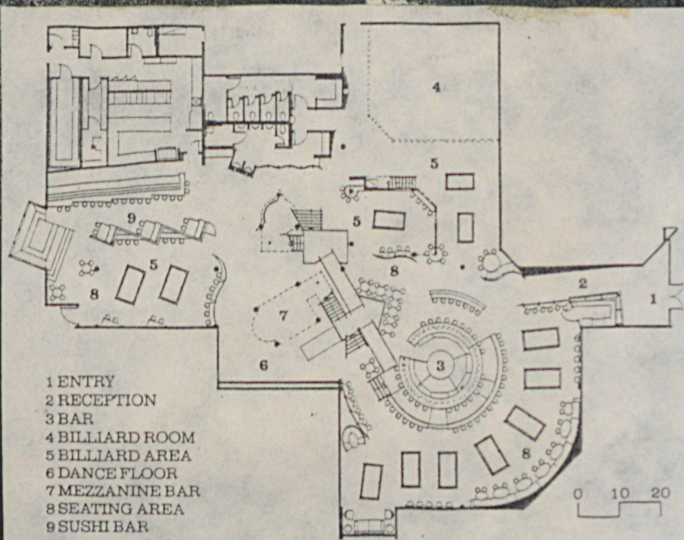
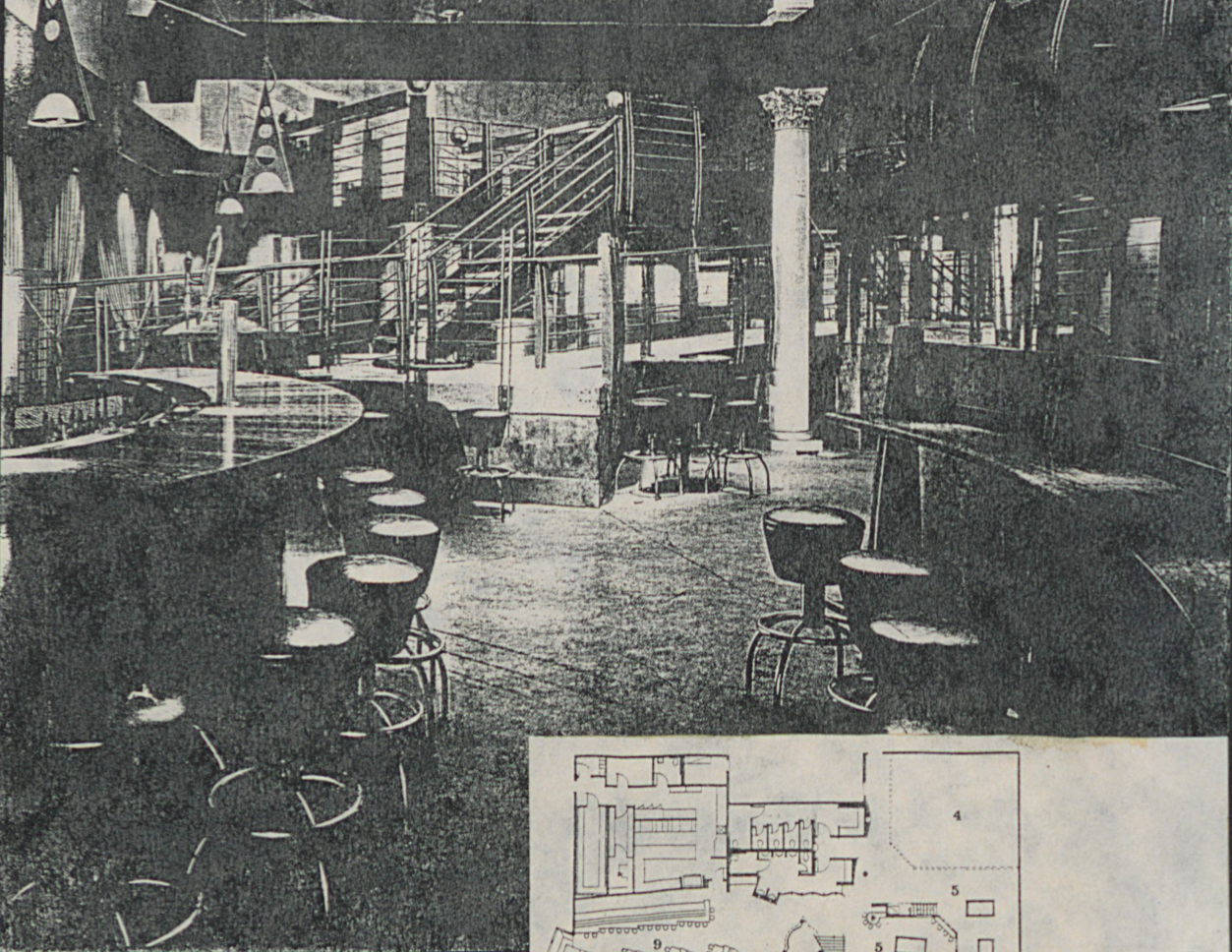
8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

9. New addition, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.



CASE STUDIES

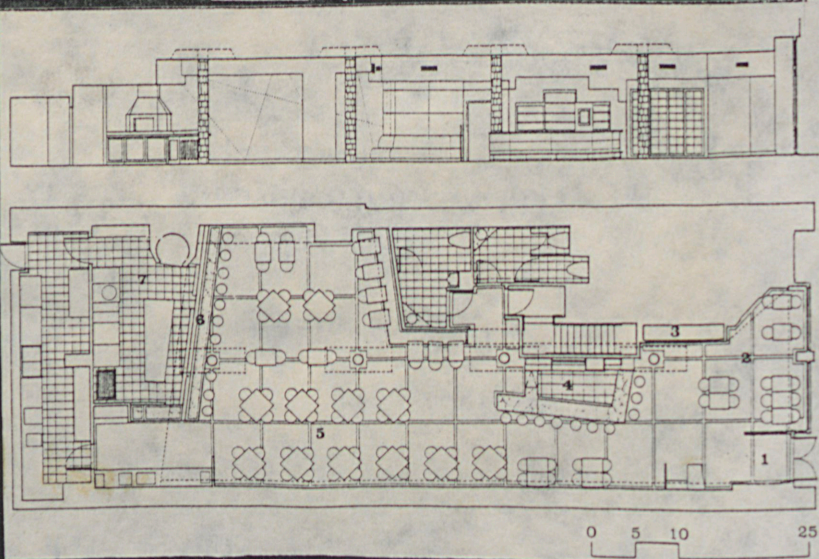
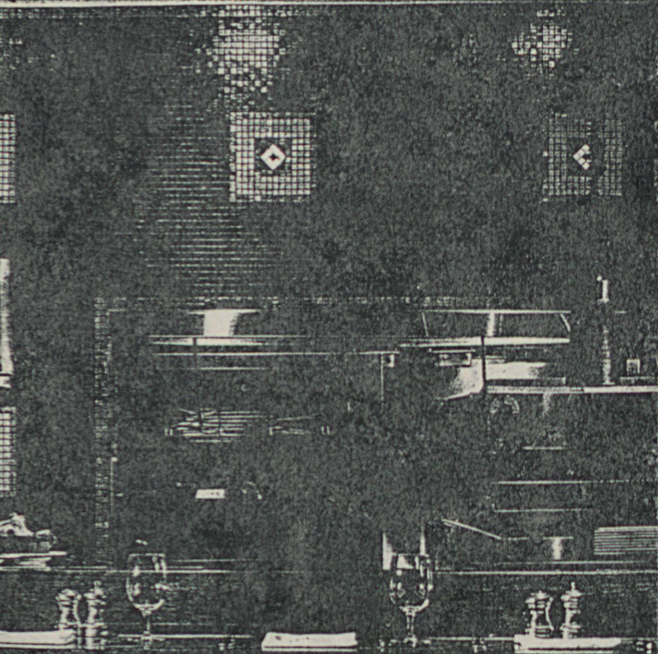


Metropolis
Hollywood, CA
Hatch Design Group
Interior Design, November, 1993

The Metropolis has on array of strong and seemingly disparate forms and materials.

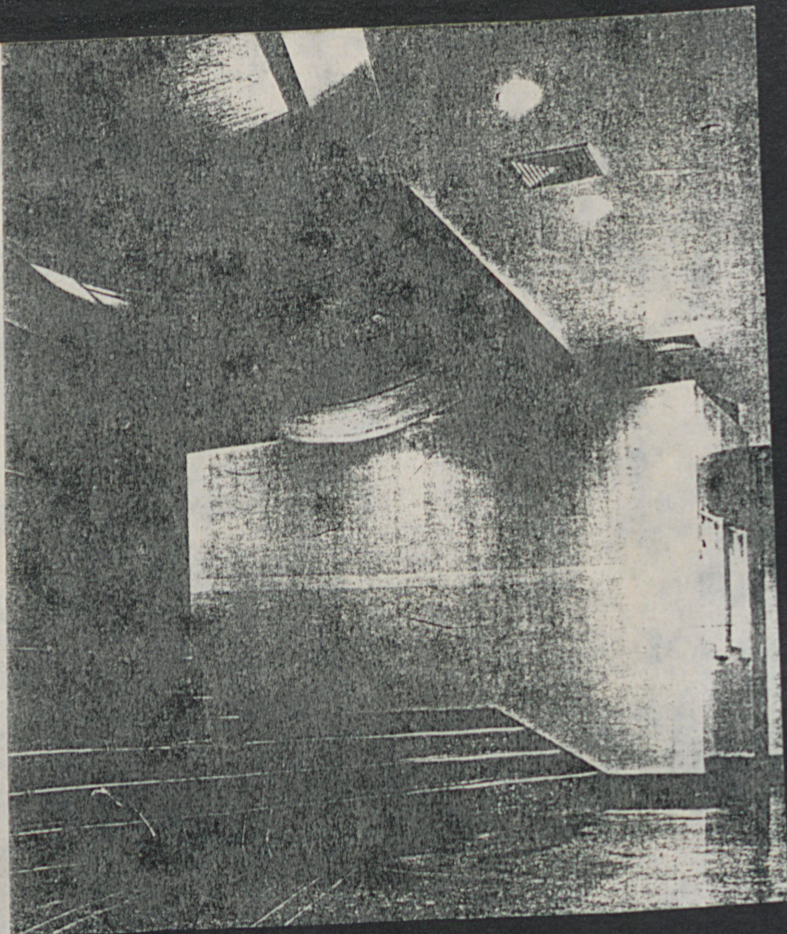
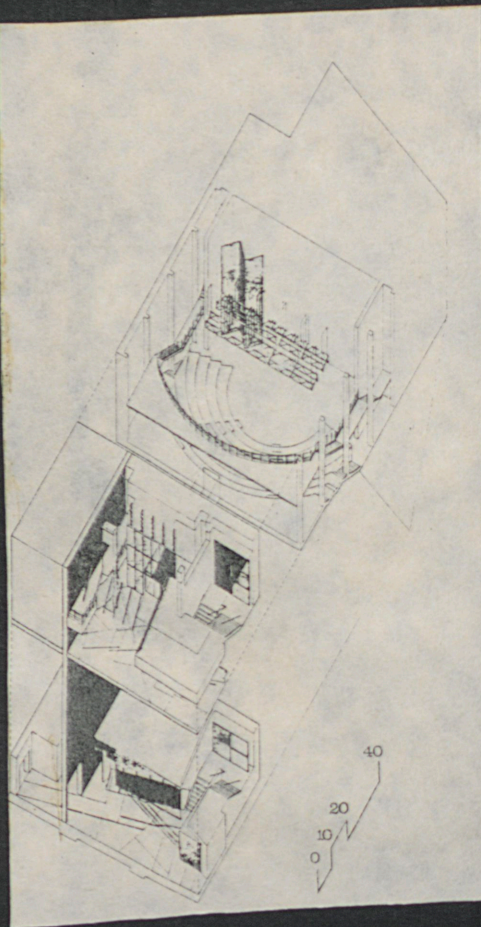
“ McCormack relied on the warm/cool materials of cherry and steel plus a strong sense of structure with blade walls, an existing steel stairway, exposed beams and concrete slab flooring newly “rusted” with iron sulfate. The bold metal forms of lighting fixtures, drink tables and a roll-armed sofa further the futuristic plot while the site’s suggested history is brought into play with wainscoting and Corinthian styled columns.”

Similar techniques of combining different new materials and structure with old materials and structure, could be applied within the Gallatin Valley Seed Company transformation.



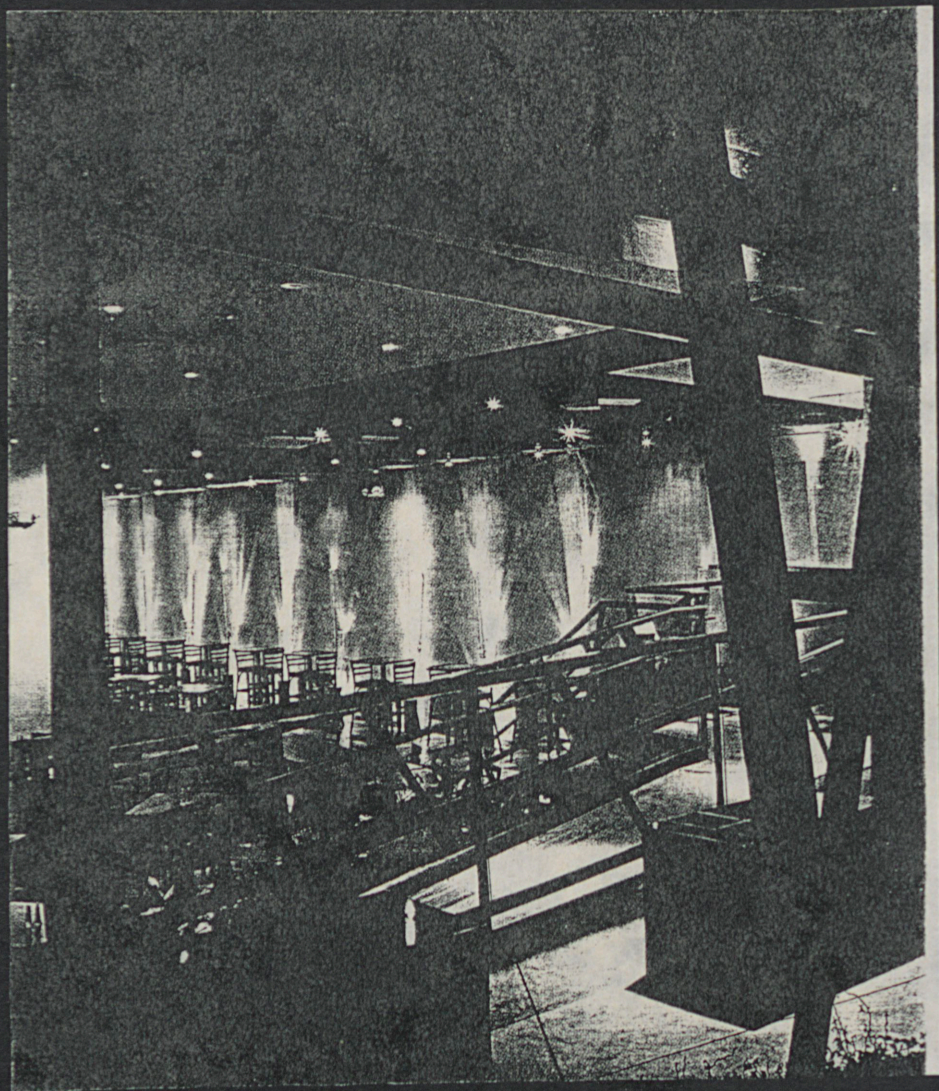
Zoe
New York, NY
Interior Designer: Jeffrey G. Beers
Interior Design, June 1993

At the Zoe "the focus is on the food and the star of the show is the kitchen". The cuisine is the main attraction. The culinary work center itself should be cast in the lead of a theatrical production. I would like to incorporate an exhibition kitchen into my design. By allowing the kitchen to be seen with all its excitement, fire, chopping, dicing, spicing, it adds to the experience of the spaces. The culinary art is a beautiful and exhilarating art form and should be seen, not hidden.



The Crossroads Theatre
New Brunswick, NJ
Parsons & Fernandez-Casteleiro
Interior Design, August 1993

This project dealt with putting a theater into an existing space. It deals with creating a functional yet exciting space that fits into the existing parameters. Most of the structure is exposed, which is how it will be dealt with in the Gallatin Valley Seed Company for there is no room to hide structure. I also think that it creates more visual complexity by having the structure exposed.



Good Earth Restaurant and Bakery
San Francisco, CA
Architect: Nonchi Wang
Interior Design, November 1993

The Good Earth Restaurant and Bakery grabbed my interest because of its theatrical design. The space was originally a warehouse, and it has been transformed into "an ensemble theatrical piece in which the restaurant space provides performers and stages."

"From entry at street level, a ramp leads down four feet to the seating area, where options include customary tables and chairs, forty inch high tables with stools lining the walls plus striking booths of stainless steel and marble. Spotlighting the raised seating is a series of fifteen custom acrylic fixtures that are both light source and aesthetic component of the scheme."

The dramatic production within this design has elements that I would like to incorporate into my design, to create a space that is dynamic.

CODE INFORMATION

Minimum Egress Requirements

Uniform Building Code, Table 10-A

A minimum of two exits other than elevators are required where the number of occupants is at least 50.

Mezzanines

The clear height above and below the mezzanine floor construction shall not be less than 7 feet.

There shall not be more than two levels of mezzanines in a room. However, there is no limitation on the number of mezzanines within a room.

The aggregate area of the mezzanines within a room shall not exceed one third of the area of the room in which they are located.

Handrails

The top of guardrail shall not be less than 42 inches in height.

The top of guardrail on a balcony immediately in front of the first row may be 26 inches.

Uniform Loads

Uniform Building Code, Table 16-A

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