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Convention center for Bozeman
Montana.

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CONVENTION CENTER

for BOZEMAN, MONTANA

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JULY 1, 1981

CONVENTION CENTER
for
Bozeman, Montana
(A Planning Approach)

by

Robert W. Culbertson

A professional paper submitted in partial fulfillment
of the requirements for the degree

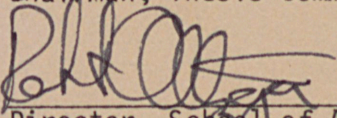
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MONTANA STATE UNIVERSITY
Bozeman, Montana

June, 1981

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Dedication

I would like to dedicate this book to my parents, Harvey and Jean Culbertson, who have made my college career possible with their support, love and encouragement.

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THESIS INTRODUCTION

I. THESIS INTRODUCTION

A) Statement of the Thesis

A convention center can be integrated into the existing community fabric of Bozeman to the benefit of the community. To achieve this goal planning analysis must be employed to establish both the specific needs of the community for this type of facility which is then reflected in the building program, and to site the facility within the town to optimize its potential benefit to the town. The facilities provided will be able to accommodate both local and out-of-town usage.

The intent of this project is to design a hypothetical convention center for Bozeman, Montana, one which will enhance the fabric of the town.

I. THESIS INTRODUCTION

B) Statement of Problem

Bozeman, a town surprisingly sparse in industry for its size is now in a position to take advantage of an industry which could be considered almost tailor-made for it. Owing to its unique geographic location, Bozeman has become a rendezvous for people who want to meet either for talking or traveling. The travel industry, which includes both tourism and conventioning, is the State's third largest revenue producer. It has been estimated that the average tourist and conventioner spend about \$60 and \$80 per day, respectively.¹ If only two-dozen visitors per day were attracted to Bozeman, this could have the same economic impact of an industry with a \$100,000 annual payroll.²

In an attempt to promote Bozeman and draw the traveling dollar, the Bozeman area Chamber of Commerce has formed a subsidiary, voluntarily funded by local businessmen. The Conventions and Visitors Bureau's (CVB) task is to make Bozeman appear appealing to visitors, particularly groups such as conventions and area-wide sporting events. The CVB, if it is effective, will be drawing significantly more than two dozen people per day. Not all merchants or professions are directly affected by the tourist and convention money, but most will benefit from the multiplier effect as the travel dollar is respent within the community.³

Bozeman has the potential of capturing a greater share of the travel dollar than it is now receiving. Taken as a rough monthly average Bozeman's two most successful de facto convention centers, the Holiday Inn and the University, host about eight multi-day

conventions per month⁴ between them. The majority of these conventions are annual meetings of in-state organizations ranging in themes from agriculture, to education, to real estate. For whatever reason, the demand for meeting space is real for both in-town and out-of-town groups. There are about thirty active service groups and organizations in town that need meeting and banquet space,⁵ and only five places including the Holiday Inn and the University, that have the facilities to meet those needs. The convention facility design should cater to both local and out-of-town needs, because both are real and both are pressing the limits of the existing facilities.

There are several strong signs of response to the convention space needs as they currently exist. The Strand Union Building is making an addition to their existing facilities so they will be able to accommodate three- to four-hundred more people at their banquet meals, and an even more significant sign is a new facility named the High Country Convention Center which is currently being worked through the Bozeman City Planning Department. Neither of facilities is being built solely to handle the existing demands for space, but are designed to create the attraction for larger conventions in Bozeman by providing the facilities to hold them in. The real test for demand (i.e., monetary investments by businessmen) has already been met. Stronger evidence for a need is hard to come by.

I. THESIS INTRODUCTION

C) Introduction to Project

The town of Bozeman still has an identity of its own but the identity is slowly disappearing under the banner of growth and progress. Portions of the town are unique to Bozeman, while other, are similar to those found in anywhere, USA. The spirit of this project will be to capture and enhance, or at the very least to maintain, the uniqueness of the town. Of critical importance to this idea will be the location of the facility and its inherent relationship to the rest of the town. A project of this type could encourage more building. Because of this, the facility takes on an even greater importance as a guide and gauge for further growth and progress in town.

The economic reasons for the project are to enlarge the city's tax base and to establish a firmer grip on the travel industry, and on the travel dollar. The project will have to deal successfully with the local needs and wants as well as those of out-of-town conventions and visitors. It must deal effectively with its physical neighbors to stand as one among them, yet it must also stand on its own.

Responding to the needs of the community with regards to a convention center, appropriately sized rooms must be provided to contain their activities. These range from the simple and straightforward meeting/banquet facilities for a variety of group sizes, to a dance floor, with or without a band, to a wedding reception, an awards presentation or anything an interior meeting hall could be used for. For a convention center to respond to the needs of

the community it should be located on a convenient and easily accessible site. Most places in town can be reached within fifteen minutes by car, but by foot or bicycle there are some pretty forbidding areas which would be avoided if at all possible. Needless to say, the facility should not be located in such an area if it is going to serve the local public.

The needs of the conventions from out-of-town are a bit more complex. Aside from the meeting/banquet facilities for groups of various sizes, the visitor from out-of-town also needs food and lodging for the duration of his stay. Some of these needs will be met in the convention complex facilities. For the rest, the surrounding businesses should offer some support. They would ideally be within easy walking distance from the convention center for convenience and to minimize the use of the car within the town.

There are two essential parts to the design of this facility. They are the program, in which the needs will be reflected, and the location of the facility; this will be a major determinant of the actual potential for civic involvement that the convention center will have. Both of these elements will have to reflect in some way the town of Bozeman.

REGIONAL DATA

II. REGIONAL DATA

A) Geographical

Bozeman is located about ninety miles north of Yellowstone Park and at the eastern end of the Gallatin Valley. It lies on the southern terminous of the Bridger mountain range and the northern terminous of the Gallatin mountain range. The headwaters of the Missouri River, formed by three fairly large drainage systems, the Gallatin, Jefferson, and Madison, lies less than thirty miles to the west, still in the Gallatin Valley.

The geologic history of the area around Bozeman is very diverse and interesting. The Gallatin Valley has through the passage of time been the bottom of an inland sea, a tropical jungle, a giant lake bottom,⁶ and a fertile mountain valley which is its present form. The area has been shaped by many forces including water, wind, glaciers, and volcanic and seismic activity. The most noticeable forces affecting the land here are the glaciers and the seismic activity. Glacially carved mountains and valleys abound all around this area, especially in Yellowstone Park to the south and Hylite Canyon which opens into the Gallatin Valley. It was seismic activity which pushed up the mountain ranges around in this region. It was seismic activity which caused the great inland lakes to drain to the north, it is seismic activity which makes Yellowstone National Park such an interesting and unique place, and it was seismic activity which created Quake Lake in 1959 at the cost of twenty-seven lives. Geologically speaking the region around Bozeman is still very active.

The Gallatin area was affected by the geological wealth given

to it and its immediate neighbors. Precious metals (gold, silver and galena) were prospected and mined in the areas immediately outside the valley from the north to the southwest, and there were several coal mines developed to the east. The geological gift which had the most direct affect on the history of Bozeman was the gift of the fertile valley soil. This gift has kept Bozeman growing even though most of the mines have long since played out and their respective towns have receded or disappeared.

II. REGIONAL DATA

B) Historic

Before the coming of the white man, the Gallatin Valley was covered with a rich plant life and contained abundant game. It had no permanent residents but was instead owned by all tribes and used as a common hunting ground. Its indian name was "The Valley of Flowers."⁷ The first white men in the area were the members of the Lewis and Clark expedition in 1805. Following the Missouri River to its headwaters they passed through the western end of the Gallatin Valley on their way to the Pacific Ocean. They were followed by trappers who roamed all over the state and all over the west taking furs and pelts, and never settling down to a permanent home. The next wave of immigrants to the area were miners, after gold initially and other metals later. They built permanent settlements but the population was by and large transient. There were no mining settlements directly in the valley.

John Bozeman initially came to Montana as a prospector and miner. It didn't take long, however, for him to realize that the real attraction and potential of the country, for himself anyway, was the land. In 1864 while he was leading a wagon train of farmers and settlers to the Gallatin Valley, his partners were plotting out the town of Bozeman.⁸ These settlers were the first permanent residents of the valley.

The town of Bozeman is of agrarian origin and it is agriculture which has kept it alive and growing. Industries, either mining or manufacturing, have never really had a large or firm hold on the town. This is not much less true today than it was fifty years ago,

but it may be changing somewhat in the not too distant future. The question is which types of industries would most benefit the town and the region.

II. REGIONAL DATA

C) Socio-Economic

Twenty years ago Bozeman was still a small town with a small town atmosphere. If you didn't actually know everyone in town it seemed that you had at least heard of them. One of two things eventually happens to a small town; either it gets smaller and finally disappears, or it outgrows its small town status. When this happens changes occur, not just the physical change of more people and more buildings, but deeper changes down to the root of the social structure. No longer is it possible for everyone to know everyone else. The feeling of community has changed. Community no longer refers to the people you know or know of, as much as it refers to the people who happen to live in the same area and share common concerns because of it. If there is a feeling of concern for the town and its future, or one which can be worked up, then the town has survived its growth intact, though not unchanged.

Bozeman is currently going through growing pains as it changes from a small town to a medium sized town. The community concern seems to be present but is not yet unified into a single process or form of resolving differences. The town is once again at the crossroads, choosing between growing with some semblance of order and community spirit or expanding with the laissez-faire spirit of the private entrepreneur. The survival of the town is not so much in question or doubt; it is the survival of the community, the feeling of belonging, which is uncertain. Something is needed to help insure its survival.

As a town grows, the demand for public services and utilities

grows too. The people and businesses within the city limits pays for them. In small town Bozeman there was an adequate tax base. The people of the farms, ranches, and dairies which gave the town of Bozeman a reason for its continued existence, bought, sold, and traded in the town though they lived in the lands beyond city limits. The money that was infused into town was taxed in part through the businesses and this combined with the landowners' tax provided the money for city services and utilities for those who lived within the town.

The university and the town have a relationship which would be very difficult indeed to duplicate with a business. The employees of the school either buy or rent land to live on and in they way contribute to the town's tax base. The land on which the school sits is not taxable and the business of teaching or education in a public institution is also not taxable because there is no profit to tax. The redemption, so far as the town is concerned, is the students, through whatever source, tend to have money to spend and some are quite adept in spending it. This benefits the merchants and the town as long as school is in session and the students are in town.

Diversity is healthy in the tax base of a town. It provides a insulation of sorts to the fluxes which affect business and industry. Bozeman's vulnerability to the dominance of an industry is best demonstrated by the seasonal decrease in population and business transactions which occurs each summer when the university enters summer quarter. Other sources of income must be found to achieve a stability through diversity, industries of some sort which will bring more money into the town. Not all industries would be entirely

beneficial or even reasonable to locate in the Bozeman area. Every industry will have a different effect on the community and the problems must be foreseen, studied, successfully resolved, and weighed against the benefits before initiating the project.

Bozeman has not attracted many new and compatible industries into establishing themselves in the town. However the town has attempted to capitalize on its geographic location though by promoting the travel industry. Bozeman originally encouraged the concept of tourism by individual families, but after the gas crunch of the mid-seventies the trend changed to groups, either in tours or attending conventions. The city is currently engaged in regearing its facilities from family tourism to handling conventions and group tours. The monetary incentive is there for the businesses, as I mentioned earlier. There are advantages for the town too. Conventions, though definitely seasonal, are much less fickle than tourism by individual families. The switch will help to stabilize the industry and this in turn will help to stabilize the community.

II. REGIONAL DATA

D) Climate

The Bozeman climate has been described to me by various people as being anywhere from completely lousy, to perfect, and all points between. The summers rarely get uncomfortably hot and the winters almost always get uncomfortably cold at one time or another. A low humidity of about 63 percent as a yearly median makes the temperature extremes from +100 degrees Fahrenheit to -46 degrees Fahrenheit⁹ very livable for the most part.

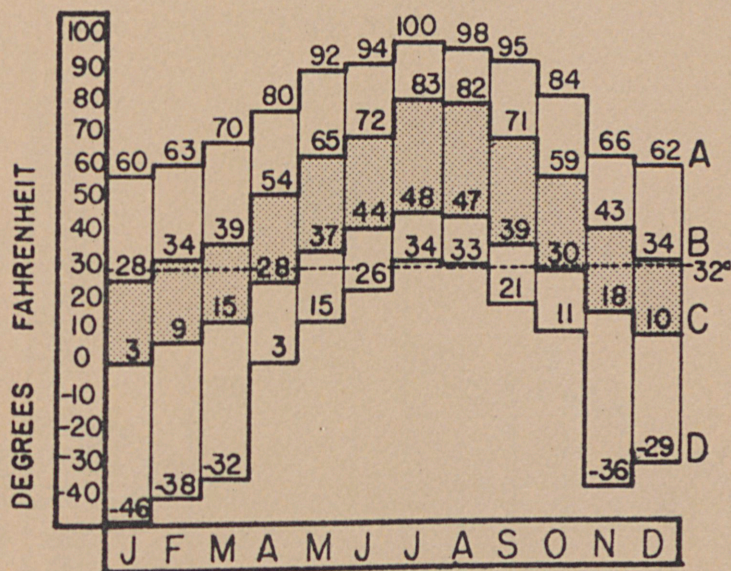
When Montana is mentioned to someone from out-of-state two things usually come to mind: wilderness and winter. The winters in the Gallatin Valley can be very severe. In fact winter is the reason why the valley remained a common hunting ground rather than the territory of one particular tribe.¹⁰ The cold was too severe and the snows too deep for them to stay. In a normal winter Bozeman will have the national temperature low about a dozen times. The record low for the valley is -46 degrees Fahrenheit in the month of January. The highest average average snowfall occurs in the same month. Annual snowfall for the valley, averaged over a twelve year period, is 56.1 inches.

The bulk of the rain falls in the spring, early summer, and in September. Average annual precipitation is 12.5 inches. Summer temperatures range the low-seventies to the mid-eighties on the average. The summers are very pleasant especially with the low humidity.

Spring and autumn incorporate some of the best and worst features of both summer and winter weather. They have the most

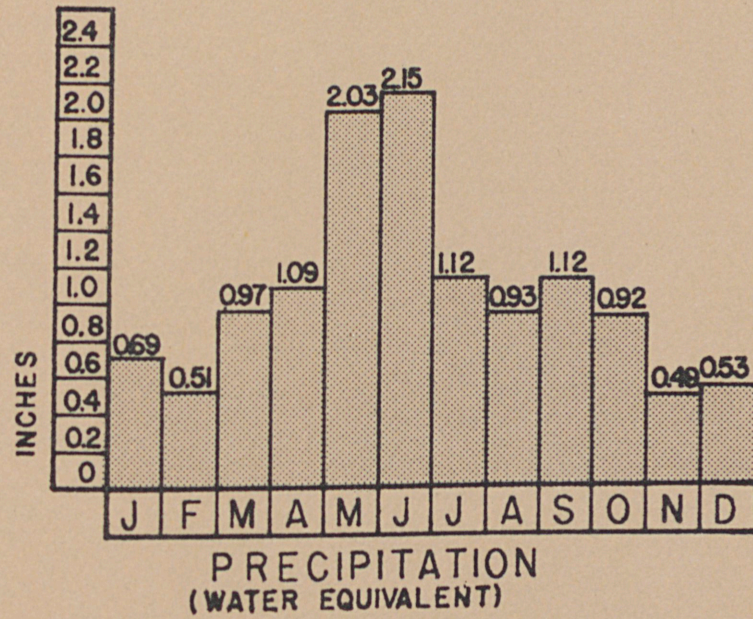
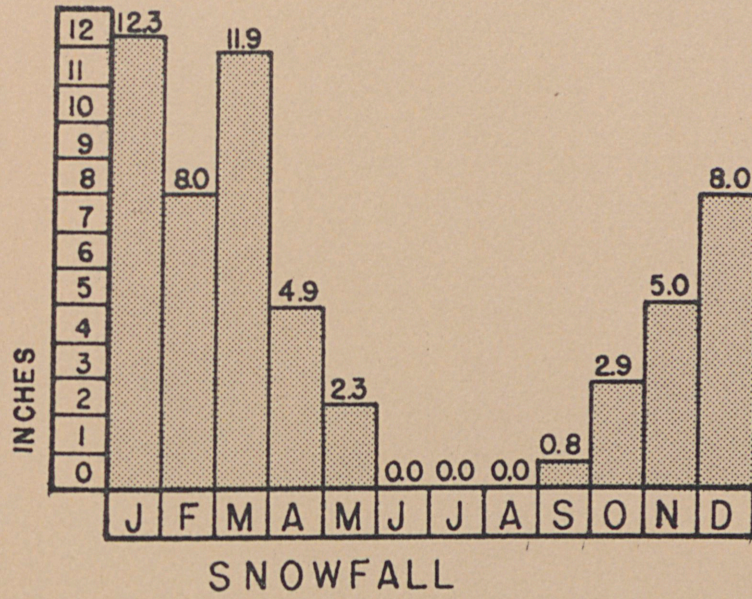
unpredictable and changeable weather of the year. The old adage about Montana weather "if you don't like the weather, wait five minutes" most likely originated in one of these two seasons.

Weather preferences are a personal choice; no one type will be perfect or acceptable to everyone. Whereas the climate in the Gallatin Valley is not absolutely perfect for travel and tourism year round it is also not completely adverse to it. You won't find eighty degree winters in Montana, but you couldn't ski in that kind of weather anyway.



TEMPERATURE RANGES

- A: ABSOLUTE MAXIMUM TEMPERATURE
- B: MEAN MAXIMUM TEMPERATURE
- C: MEAN MINIMUM TEMPERATURE
- D: ABSOLUTE MINIMUM TEMPERATURE



SITE SELECTION

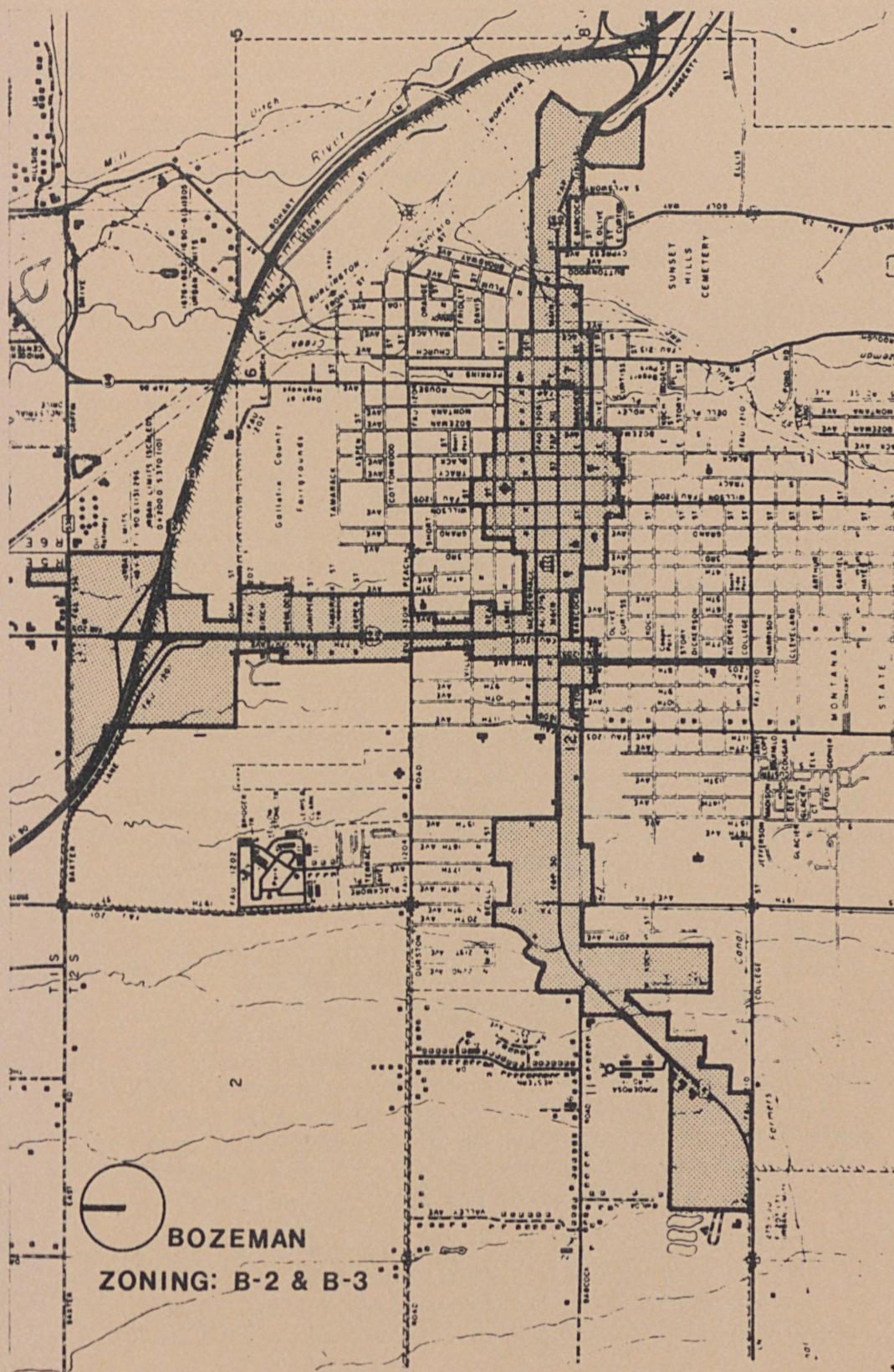
III. SITE SELECTION

A) Considerations for Site Selection

After deciding that Bozeman has a potential to draw people, (i.e., conventions), the next decision is where in Bozeman would be best to locate a convention center. According to the city zoning code and the city planning department, the ideal location is in the community highway district (B-2). The reasoning behind this is solid economic reality, how to get the most building for the least money. The economics of the situation are important, yet I don't believe they should be the only consideration to be used. As William Tabler put it "must our highest goal be the lowest common denominator."¹¹ It is my contention that the city, town, or community which will receive the building, should also be the recipient of careful planning to optimize the beneficial impact of the development.

Bozeman has no master plan to shape its growth yet. The only measure of control the city has established over its growth is a zoning plan which in essence prevents incompatible uses from becoming neighbors, and a city planning commission whose task is amending or abridging the zoning plan as need dictates, and approving all buildings planned within the city limits and checking them against the zoning plan.

Convention centers in Bozeman are zoned for either the community highway business district (B-2) or the central business district (B-3). Using the B-2 and B-3 zone areas as the limits for site possibilities means that the location will be on or within a block or two in either direction of, East Main Street, West Main Street, or on North Seventh Avenue.



Users are another important consideration. The convention/meeting facilities will be aimed at two distinct potential groups of users and their needs. These are the local service groups and organizations, and the out-of-town convention groups. The final location must cater to both of these.

Other site location criteria are:

- Visibility: Can the site be easily seen or found by people in Bozeman for their first time?
- Accessibility of the site: Can it be easily reached, or does it require a familiarity with the Bozeman traffic system? Can it be reached by foot or bicycle, or only by car?
- Compatibility with existing buildings: By building in the appropriate zoning areas incompatible businesses are, in theory anyway, not a problem, but are the neighboring businesses the type which could most benefit the convention center thereby augmenting the beneficial impact of the center on the community and the drawing power of the convention center, or will the ambient businesses be unaffected by the extra people?
- Ability of the area to accommodate the influx of traffic and people: Is the scale of the project larger than the area can handle or will the proper refinement of the traffic system solve most problems? Also of some concern would be the size of the surrounding businesses and their ability to accommodate, as a group, a large influx of people.
- Cost of developing: Prices are generally higher in the built-up areas. Building in the B-3 area, for example, could necessitate moving, removing, or modifying an existing business; this will cost more than building on empty fields in the B-2 district. The key is the potential for returns, if it exists at one level in one place but is not as high in another, then the center should be built in the area of highest probable returns. Calculation of the returns should indicate both private and public benefits.
- Relative location with respect to off-site facilities: Businesses that cater directly to the visitors of the convention center, such as restaurants, bars, and hotels, are helpful if nearby. Other facilities,

such as shopping centers, libraries, museums, are also helpful if nearby. In a city of Bozeman's size nothing is very far away by car, however the convenience range for pedestrians is considerably smaller. With most attractions within walking distance, cars will tend to be driven less. This reduces the traffic congestion somewhat while retaining the shopping strength.

-Room for Expansion: If expansion of facilities is to be desired at some future date, the building design should accommodate this need as extra land may or may not be obtainable at that time. Viable expansion options should be included in the initial planning to minimize the future costs.

All of these criteria will be weighed for each of the potential sites. In each case, and in the final analysis, the good of the developer will be balanced by the potential for good for the community at large. If circumstances occur such that the developer cannot make a sufficient projected return by designing with the public good in mind then the project would not be built. If on the other hand it is the community that will not receive a decent return by whatever solution is deemed most reasonable, then here too the project should be reconsidered.

III. SITE SELECTION

B) Alternative Sites

Which area or zoning district would offer the most opportunity to the developers and the city? There are many examples for larger cities which suggest very strongly that there is such a place. Through analyzing the pros and cons of the two zoning areas in town I hope to find such a place in Bozeman.

The Community Highway District (B-2) is, according to the Bozeman City Planning Director and the Chamber of Commerce, the best place to locate a convention center. The arguments for locating the convention facilities there were repeated to me on three separate occasions. The first was in a talk with the Bozeman City Planning Director, Paul Bolton. The next time was in a talk with a representative of the Bozeman Area Chamber of Commerce, and John Belleghen, the manager of the Holiday Inn of Bozeman was the third source for virtually the same set of opinions. As it turns out all were acquainted with the planning report made for the High Country Convention Center and had accepted its validity. Some of the reasons stated are:

- Greater Visibility: The B-2 districts surround the freeway accesses and as a result are very visible from the freeways. With the emphasis on attracting conventions and tour groups this seems a little redundant though it does increase patronage from people passing through the area whether tourists or just passersby.
- Easier Auto Access: The land around the freeways, which seems to be the preferred location by city officials now was designed for cars. The area is capable of handling a higher volume of traffic at higher rates of speed. There is, however, no provision for pedestrians or reason for them to want to go to those particular areas.

- Fewer Traffic Problems: The area is already designed to handle more traffic than it currently contains, so less city money would have to be spent redesigning the traffic patterns.
- Cheaper Land: There is land in the B-2 district near the freeways which is currently undeveloped. It would, without question, cost less than the developed land located elsewhere within the town.
- Closer to the Airport and Bridger Bowl: It offers the quickest means of getting to important out-of-town places. This is accomplished by never really bringing the visitors into town.
- Don't have to remove existing businesses: There is plenty of land still undeveloped which could be easily built upon without removing existing businesses from Bozeman's tax base.
- Less Expensive Expansion: Should expansion be desired in the future there will in all likelihood be enough land available to accommodate the plans without excessive cost or having to displace existing businesses.
- Can Build Self-Contained Complex: A complex can be built to contain all facilities needed in one unit. These could include meeting/banquet facilities, a restaurant, bar coffee shop, hotel, and a selection of recreational opportunities. The idea is to have a "captive audience;" a condition which helps in the management of conventions and reaps the maximum of money for the convention hosts from the conventioners because they don't go anywhere else to spend money.

In cities like Kalamazoo, Michigan, Cincinnati, Ohio, Philadelphia, Pennsylvania, and Toronto¹² the efforts to improve their cities and stave off further commercial deterioration involved in each case changing the Central Business Districts to make them easier to reach and more pleasant to be in, and to introduce certain key businesses, industries, or special services of some sort to draw the people back. In addition to large savings in capital investments which had been just depreciating in the old vacant downtowns, a historical link with the past has been preserved.

Reasons for locating the convention facilities in the downtown are:

- Closer to In-Town Services: Stores and businesses not directly associated with a convention center may benefit from their location. The convention center would provide all the primary services needed but other services or amenities could be provided by the existing businesses to reduce the area and parking requirements of the center.
- Provides Historical Link with the Past: The central business district usually contains the oldest buildings of the town and is on or near the original townsite. This of itself is not of critical importance but some link of the past with the present and future of the town is desired to achieve the desired continuity of the community fabric.
- Larger Investments could mean Larger Returns: Building in the downtown will cost more because the land is developed for the most part and it could very well necessitate the removal of several businesses to put in a facility of this size. But the facility would have so much more in ancillary services to offer it could conceivably draw more conventions as well as in-town meetings.
- Accessible to All: The downtown though definitely car oriented, has provisions for pedestrians which could be improved without too much effort. Traffic velocities are somewhat slower too making bicycle use to the area safer and pedestrian use more comfortable.
- Possible Increase in Pedestrian Activity Without a Proportional Increase in Traffic: When all stores in the downtown are within easy walking distance visitors would find no need to drive, in fact walking would be more convenient most of the time except in adverse weather. This problem could be at least partially rectified by a system of awnings in the downtown.

Each zoning district has some advantages which I've tried to outline briefly and some disadvantages which must be either resolved or accommodated. In order to judge these properly we must review the basic criteria. There is one primary rule: to truly be a part of the community there must be a relationship in which both

parties (i.e., the developer and the community at large) benefit in some way. Adding to the tax base is one benefit but it is almost incidental when compared to others. Influencing the growth of the town in a favorable manner would be a much better trade-off. A business which has the potential to attract other businesses is very valuable indeed if the proprietors look beyond their own immediate needs and conveniences. If merely by locating their building in a certain area they are able to strengthen the drawing power of their immediate neighbors, then who are they helping in the long run but themselves? The immediate hurdle is the money or extra money which may have to be invested to gain in the mutual benefactor's role.

The disadvantages of the B-2 district are:

- Potential Mutual Benefits are Overlooked: In the self-induced isolation the town is deprived of exposure by potential patrons. They may not buy anything but at least they should have the chance to look. A convention center has a great drawing potential for out-of-town money. What harm would it do if other businesses were also able to tap that source?
- Anonymous Architecture: The commercial strips which constitute the B-2 zoning district are a cacophony of styles, sizes, scales, and densities. The addition of any one building or complex is very unlikely to alter that. The link to the community would be noticeably weakened by building in the B-2 because there is virtually no point of reference which can be used to tie the building to the town. Areas like the B-2 districts can and are located virtually everywhere in the U.S. It may give a national identity of sorts but not a good local one.
- Destabilizing Effect: It could quite possibly draw people away or prevent them from reaching the downtown, out to an area which would benefit no one but the proprietors of the convention center. By drawing any number of people from the downtown you are in effect weakening an area of already questionable strength.

Some problems with the B-3 district are:

- Increased Traffic Congestion: Building in the downtown will necessitate auto access and increased usage. The streets as they currently exist adequately handle the traffic we have now. The streets, and the overall traffic pattern as well, will have to change to accommodate more traffic, especially in the downtown area. Excessive congestion can be avoided through proper planning.
- Necessity of Removing Existing Stores: The B-3 area is developed and bringing in a business the size of my proposed convention center will necessitate the removal of some existing small businesses. There are only two points which I can make to defend this: the convention facilities would probably bring in significantly more tax revenue than the existing small businesses, and the downtown needs something to draw people in which a convention center could very well do.
- Increased Parking Problems: Bringing more people downtown will bring more cars downtown and thereby increase the demand for parking. The convention center complex will contain all parking required for the activities it contains and the parking needs for the rest of the area should be planned for and incorporated into the revised traffic pattern.
- Lack of Visibility: Being in the downtown among other buildings, the center won't have the same degree of visibility and will probably not get as much spur-of-the-moment patronage, but with Bozeman's fairly simple major traffic pattern in the form of a "T" and the larger size of the convention center, lack of visibility will not be a fatal handicap.

With all is said and done, either of the zones will allow a convention center to exist. Investments would be cheaper in B-2, but B-3 would be more accessible for local use. The convention center has the potential to draw people; the question is, where would it be best to draw them? Which area could offer the most help? Which area would be most worth saving by increased patronage?

It is my thesis that the Central Business District has the most to offer and also stands to gain the most from the convention

center. The CBD contains 34% of the commercial tax base for the town of Bozeman.¹³ The rest is thinly scattered along East and West Main Street, and on North Seventh Avenue over many times the downtown area. The convention facility could have the strongest affect on the CBD, and it would most benefit the town as a whole, in my opinion, by being there.

III. SITE SELECTION

C) Selection of Site

Bozeman's Central Business District (CBD) is about five blocks long, from Grand Avenue to Rouse Avenue on Main Street. Within this area a site of sufficient size must be found, one with a potential for good visibility, relative ease of access considering the present traffic patterns, and one which would cause a minimum of disruption to the existing downtown environment. All areas are essentially equally accessible to the needed services and utilities.

Four sites are considered, three of them because the edge of the CBD and one the middle. The sites were picked initially on the potential for minimum disruption and then the other criteria were applied.

The first site considered was behind the Bozeman Hotel and on the lot of the Service Electric building, and parking lots surrounding it. There are a minimum of buildings there, and adequate space, but the site lacks visibility and exposure to Main Street. The relatively high density and quality of buildings preclude any major access to the Main Street and even though there are two sides completely open to major secondary streets (East Mendenhall and North Rouse Avenue), exposure or visibility was slightly down.

The second site considered was across the street from the first. It consists of the lot behind the Eagles between the creek and Rouse, the current "10 Commandments Park," and possibly the Eagles building lot. Visibility and exposure both received very high marks. The site fronts on Main Street, Rouse and Babcock, does not contain a significant number of buildings, and is easily accessible. The

creek could be both a plus and a minus in that the area is about as far into the flood plain as you can get without actually building in the creek. The third point not entirely in its favor is the lack of the proper kinds of sympathetic business in the immediate vicinity, specifically hotels or motels able to accommodate the convention center visitors. Also the area is on the very edge of downtown. Across Rouse there is nothing to evoke interest or draw people. It would not be using the convention center potential to the fullest.

The third lot I checked as a possibility is the area west of the old Carnegie Library on Mendenhall. The primary reason for consideration of this lot was that it is a fairly large relatively open space near the middle of the downtown. Other than that the lot doesn't have much going for it. Main Street is pretty well walled off from the lot. Conceivably a building or two of lesser quality could be acquired for access to Main Street, but there is still the problem of the back alley which has a cluttered appearance. The buildings lining the alley are owned by several different people. They have no obligation to the convention center to invest the time and money needed to clean up their alley, yet they could conceivably be induced to make the commitment if there were direct economic advantages for them. However, access to the site would be a problem as well as visibility.

The fourth site, also on the edge of the B-3 district, is on the block containing the Baxter Hotel. The block has no significant buildings or businesses, other than the Baxter Hotel, and the Baxter could be considered an advantageous neighbor. It has limited convention facilities and roughly eighty hotel rooms. By consider-

ing the whole block expendable, except the Baxter, there is a potential to get better than half a block fronting Main Street, half a block fronting on Willson Avenue, and the whole block length fronting on Grand Avenue and Mendenhall. The Baxter is a very visible local landmark which can, because of its height, mass and sign, be seen from a long distance in almost any direction. Though it is on the western edge of the B-3 zoning district it is not the end of the commercial area. Within three blocks to the west there is the Gallatin County Courthouse, two restaurants and about eighty more hotel rooms. The alley running east to west through the block will have to remain open though it may be bridged as long as proper clearance is maintained for service vehicles.¹⁴ Access to the site is excellent. Except for the corner of Willson and Main where the Baxter is, the block may be penetrated at any point. Although some points would necessitate the removal of existing buildings, none of the buildings have any intrinsic value which would warrant their salvation.

The block containing the Baxter Hotel is the block I will use. It is big enough to hold all of the anticipated functions of the convention center and to give the designer a fairly free hand at organizing the complex. The potentials for visibility and accessibility are very high. There are enough food and lodging facilities in the near vicinity to be mutually beneficial to all parties involved. It is located deep enough in the town to be a potential help to the CBD by drawing people down to its edge; to draw people into the CBD and have them stay and enjoy the area will require unified action by the downtown merchants.

SITE CONDITIONS

IV. A) SUBSURFACE

IV. SITE CONDITIONS

A) Subsurface

1. Soil Condition/Bearing Values

The latest general soil survey done in Bozeman and the valley was done in 1930 to 1931. According to the map and report the site of the Baxter Hotel block lies on Huffine silt and loam though it is near a border between the Huffine and the Bozeman silt and loam.¹⁵ The precise accuracy of these maps for any one particular place is questionable according to Dr. Gerald Nielsen of the Plant and Soils Department, so it could conceivably be either. The tests were made with agricultural purposes in mind and do not go down too far beneath the surface; sixty inches is usually the deepest reference which can be found. The Bozeman silt and loam would be slightly better than the Huffine silt and loam though neither is even fair for building purposes. Bearing values were not provided in the report data primarily because the information is of little value in growing crops. The only way to be sure what kind of soil is there is to take samples and analyse them. The Baxter Hotel has stood in its present site for almost 52 years now. It is seven stories high. With this kind of precedent I think it should be possible to build using care.

IV. SITE CONDITIONS

A) Subsurface

2. Water Table Information

There are no general water table information maps published for Bozeman. However there was no trouble going down to a normal basement level for the existing buildings on the lot. The Baxter Hotel built with a basement in 1929, has experienced no water seepage problems. The Rolfe and Wood auto showroom and garage built about 1950 has experienced no water seepage problems either. The building containing the Wong's Restaurant and Grill has a basement with no apparent seepage problems attributable to a high water table.¹⁶

Tests done for the new Montana Bank building on the block immediately west of the Baxter's block hit ground water at twelve feet.¹⁷ I shall assume this value holds for the Baxter block finding no evidence to the contrary.

IV. SITE CONDITIONS

A) Subsurface

3. Seismic Zone Data

Bozeman is located in Seismic Zone No. Three. This indicates a potential to receive very strong quakes and major damage. Ninety miles south of Bozeman is Yellowstone Park which is one of the very few places rated zone four.¹⁸ The danger is present and very real, and concern for it should be reflected in the design.

There are no faults running through the site though there are several just to the east of town running to and along the base of the Bridgers.

IV. B)

SURFACE

IV. SITE CONDITIONS

B) Surface

1. Topography

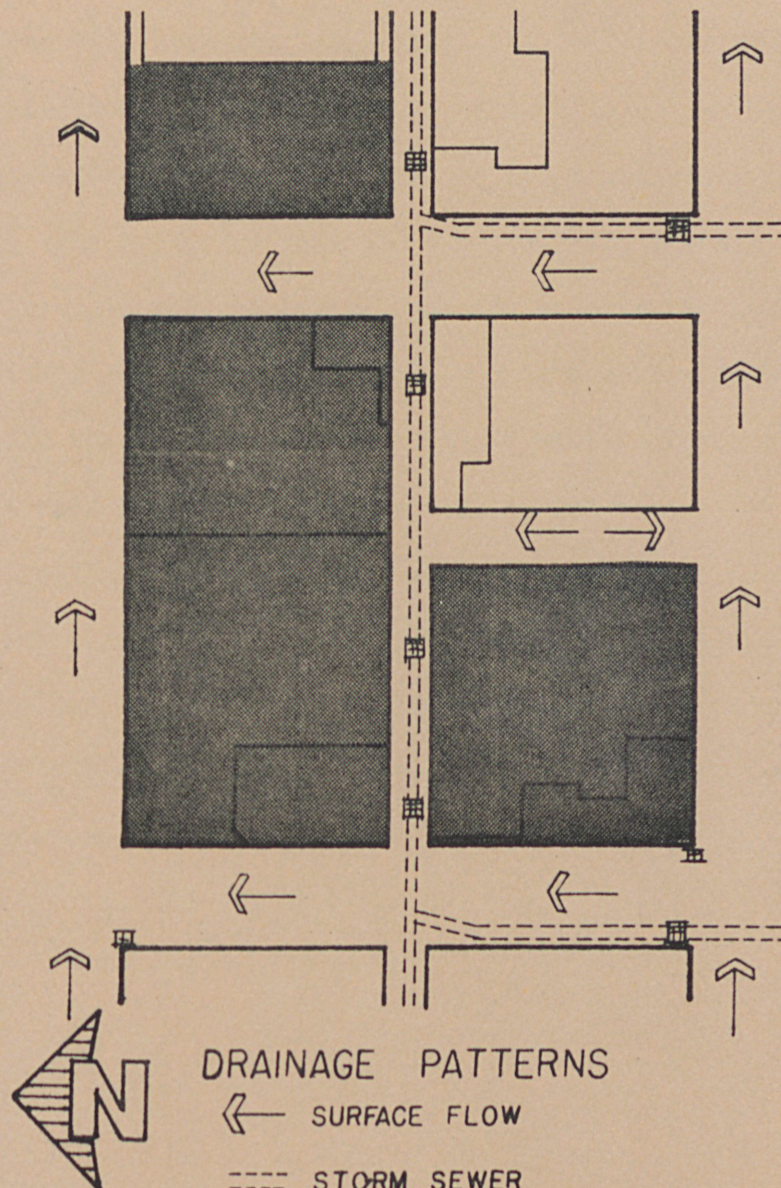
The site has a slight slope to the north. The actual elevation difference from Main Street to Mendenhall is roughly six feet. The difference amounts to only about one-half level. The highest corner of the block is Main and Grand, while the lowest is Willson and Mendenhall. The approximate slope of Main Street is 1:200 sloping down from Grand to Willson. On Willson from Main to Mendenhall the slope is between 1:60 and 1:70. The slopes of Grand and Mendenhall are fairly close though Grand is probably just a hair steeper. They are approximately 1:90 to 1:100. At present the interior of the block has only a slight slope to the north terminating in a four to five foot high embankment paralleling Mendenhall in the middle of the block between Bekins on the west and Rolfe and Wood on the east.

IV. SITE CONDITIONS

B) Surface

2. Drainage Patterns

Drainage patterns as they currently exist will send surface run-off to the northeast corner, that of Willson and Mendenhall. Run-off from there continues down to the east. The block is connected to the city's storm sewer system and the storm sewer collector runs under the alley to the east through the middle of the site. This is another reason to avoid building on the alley.



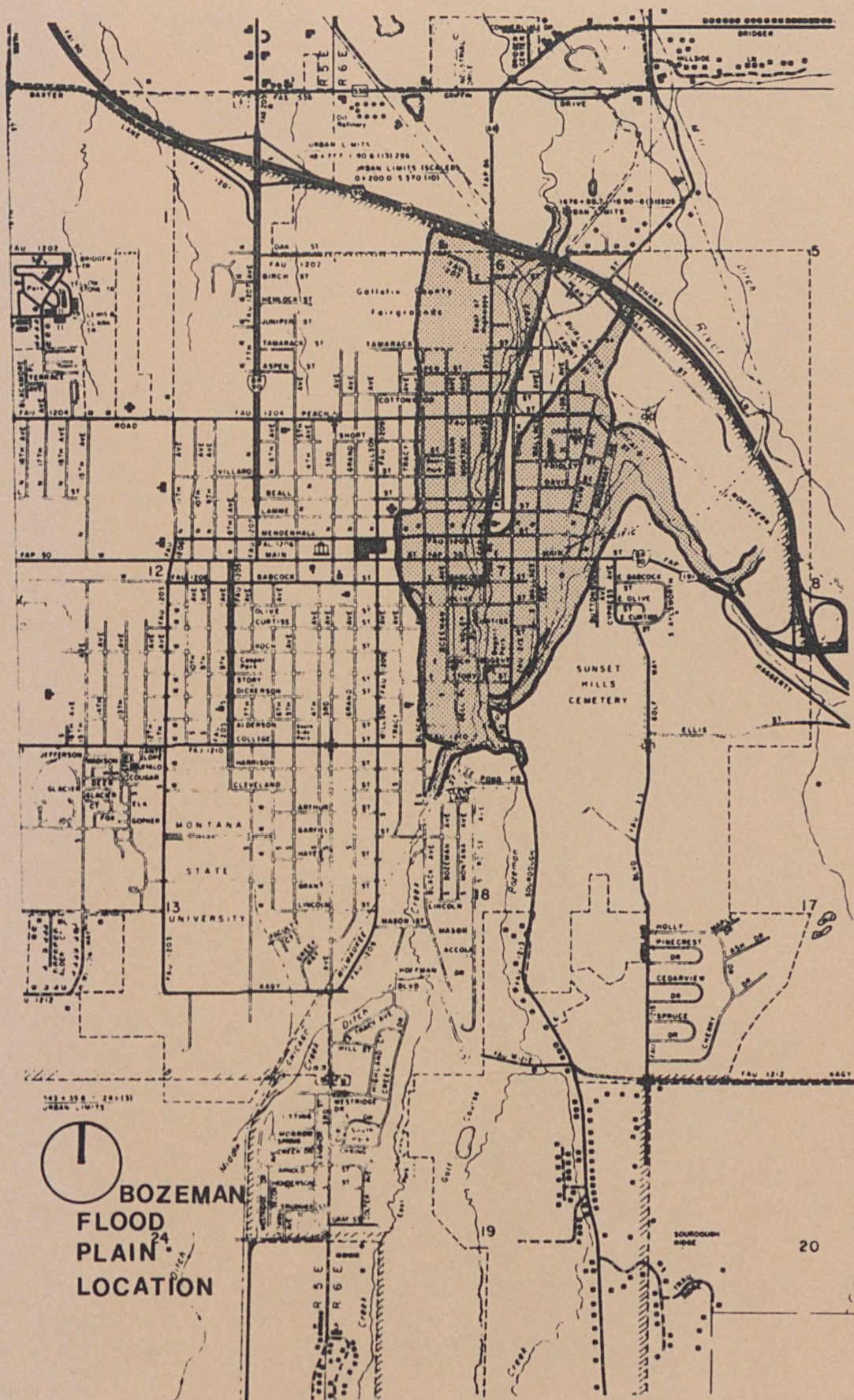
IV. SITE CONDITIONS

B) Surface

3. Flood Plain Location

The flood plain study done in 1972 indicates the block which contains my proposed building site is about one block off the flood plain.²⁰ The flooding, should it occur, would come from the Bozeman Creek. Primary flooding zones which get deep water are located in the immediate vicinity of the creek. Secondary flooding occurs when an obstruction of some sort sends the water out of the main channel and initiates what amounts to shallow street flooding.

A dyke above Dell Place about even with Alderson Street was picked as having the most potential to break and start the secondary flooding. The projected path which would bring the water closest to my site would take the water from the hole in the dyke to South Black Avenue, and north from there. Somewhere between Olive and Babcock the shallow flow moves one block west to Tracy where it flows about one full block away from my site to the east. The flow would continue north on Tracy to Lamme where it would move back east to North Black Avenue which it would follow north to rejoin the creek flow. A flood of this nature would be on the fifty to one-hundred year flood plain; its extreme edge falls one full block east of the Baxter Hotel and my site.



IV. C)

MICRO-CLIMATE

IV. SITE CONDITIONS

C) Micro-Climate; General Conditions as Modified by Site

1. Site Orientation

The site lies on the north side of Main Street and will have its major public connection facing south to Main Street. The slight northward slope of the site will be negligible.

IV. SITE CONDITIONS

C) Micro-Climate: General Conditions as Modified by Site

2. Solar Access (Shade)

The Baxter Hotel is the only object blocking the sun from any major portion of the site. The hotel is a little over a third of a block long and seven stories high. It casts a long winter shadow which essentially hits the whole site each morning leaving the noon and afternoon sun full access to essentially the whole site.

There are no trees on the site as it exists now, and except for the Baxter Hotel there are no buildings big enough or close enough to deprive the site of any significant portions of its sunlight.

IV. SITE CONDITIONS

C) Micro-Climate: General Conditions as Modified by Site

3. Wind Conditions

The wind is somewhat more muted on the ground level than it would be in an open field due to the extensive building in the downtown area. Yet strong winds especially from the east or west tend to be funneled down the two story canyon walls placed roughly 110 feet apart which constitutes Main Street. This however would have little effect on the centers of the blocks.

Strong south winds do occur, though not very often. This wind is fairly well muted on the ground increasing as you go up until either tree top or roof top level is achieved. North winds would have the same effect.

The Baxter Hotel is tall enough and massive enough to deflect local winds. It is not however positioned in such a way so as to magnify the deflected winds through a funnel or to create a Venturi like effect through its shape. Conceivably problems of this sort could arise through new placement of construction. Care shall be taken to avoid this possibility.

**IV. D) MAN-MADE
SITE
CHARACTERISTICS**

IV. SITE CONDITIONS

D) Man-Made Site Characteristics

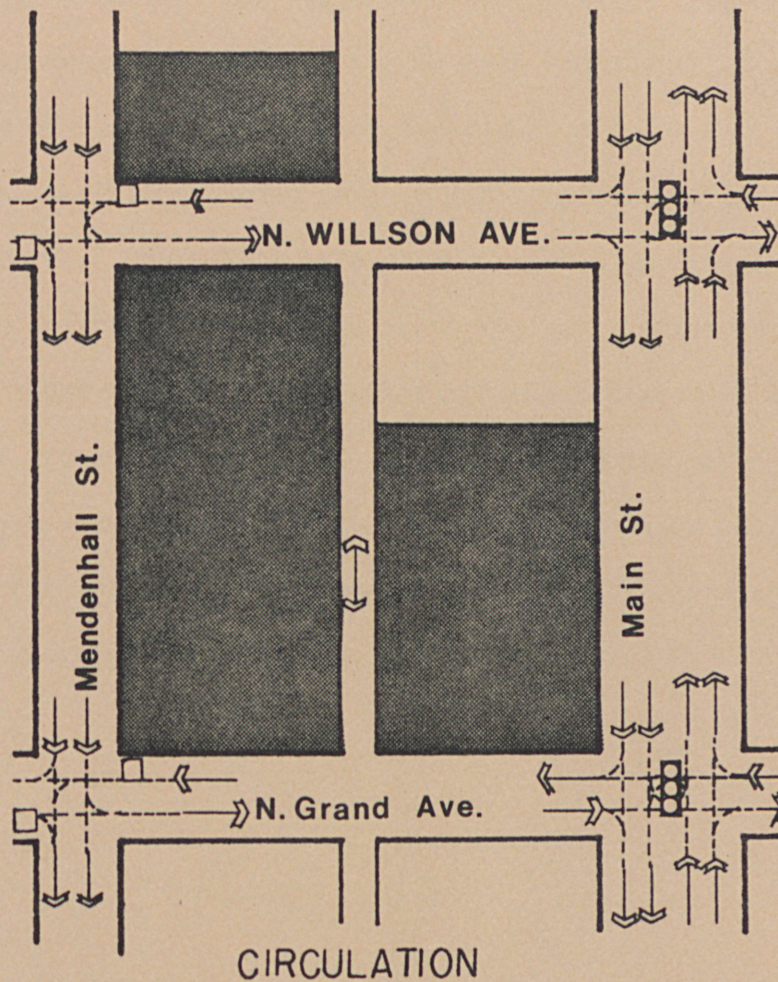
1. Circulation Systems/Access to Site

The site is surrounded by streets on all four sides, Main Street to the south, Mendenhall to the north, North Willson Avenue to the east, and North Grand Avenue to the west. The busiest street by far is Main Street. It is still designated State Highway 10 and as such is maintained by the state. It is one of the two primary streets in town, North Seventh being the other. A significant proportion of the traffic using this street is through traffic with no thoughts or intentions of stopping. This traffic includes heavy trucks. The speeds average 20 mph, due to the placement of traffic signals at the intersections of both Main and Willson, and Main and Grand, and throughout the downtown. Parallel street parking is another factor which tends to slow the traffic down.

Traffic on Main Street is fairly constant throughout the day though with noticeable increases occurring periodically. These increases happen around lunch time, 3 PM when the high school lets out and when shoppers head home to avoid the rush hour, and then again around 4:30 to 5:00 PM with Bozeman's rush hour traffic.

Mendenhall is a one-way street going west. It is a key part of a traffic plan initiated several years ago to relieve some of the through traffic pressure from Main Street. Its average speed of traffic flow is close to 30 mph. Its flow patterns correspond directly to those of Main Street.

North Willson Avenue is part of a system of secondary collector streets which are designed to facilitate the moving of large



-  TRAFFIC SIGNAL
-  STOP SIGN



numbers of cars through the area. The portion of Willson between Main and Mendenhall is not used very heavily. South Willson Avenue however has a fairly continuous flow of traffic providing access and egress to most of the residences in southeast Bozeman.

North Grand Avenue marks the western edge of the block. It is a two-way street with only irregular flow.

The site is surrounded on four sides by streets and restrictions are few. Mendenhall is a one-way street and you can't make a left turn off Main Street on to North Willson. Other restrictions are just those dealing with regular streets. Care will be taken to avoid the frustration of having to drive the wrong way down Mendenhall to get around the block to enter the convention center's parking lot. The situation will be carefully studied to avoid as much as possible additional problems on already busy streets.

IV. SITE CONDITIONS

D) Man-Made Site Characteristics

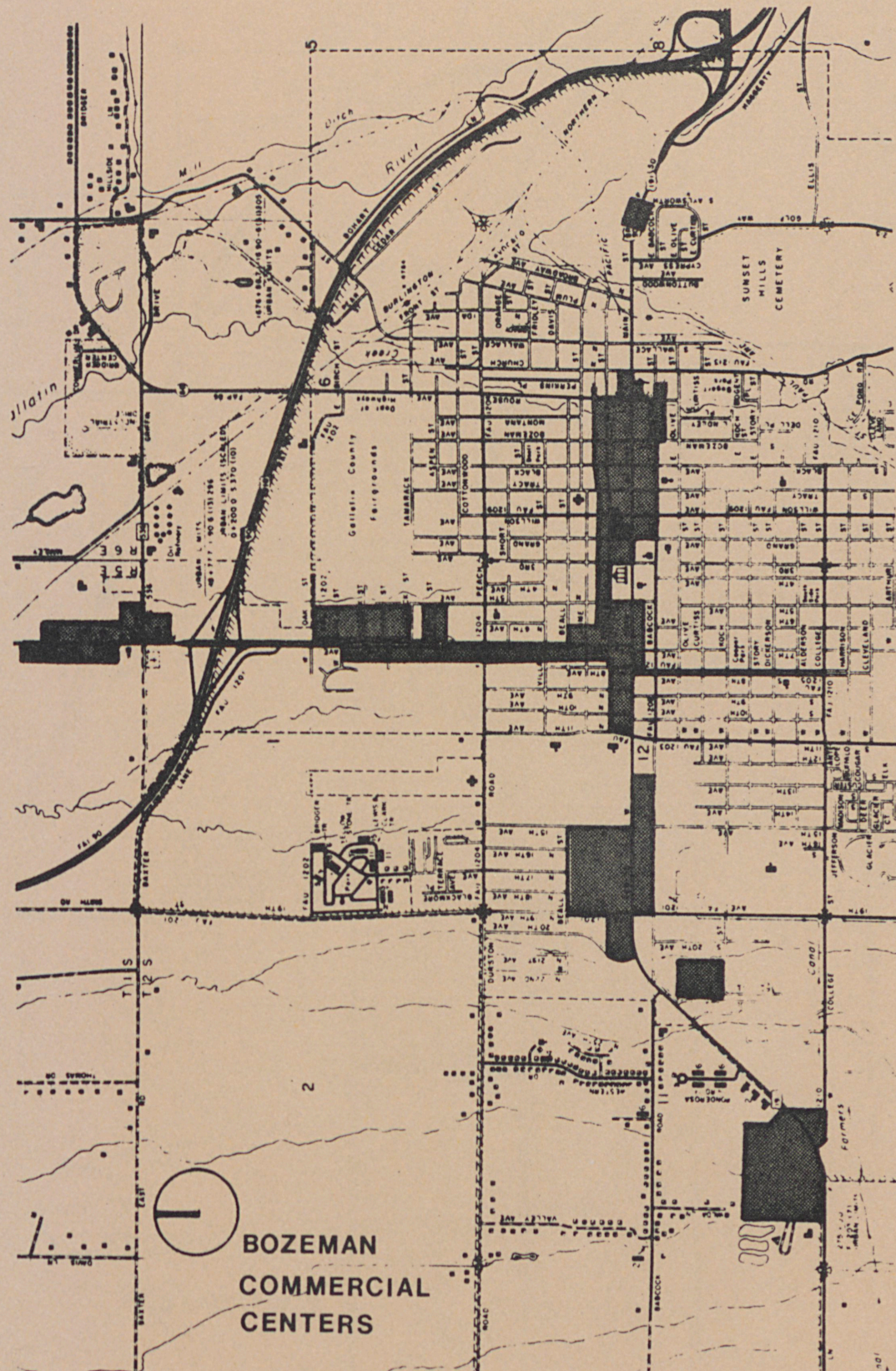
2. Off-Site Facilities

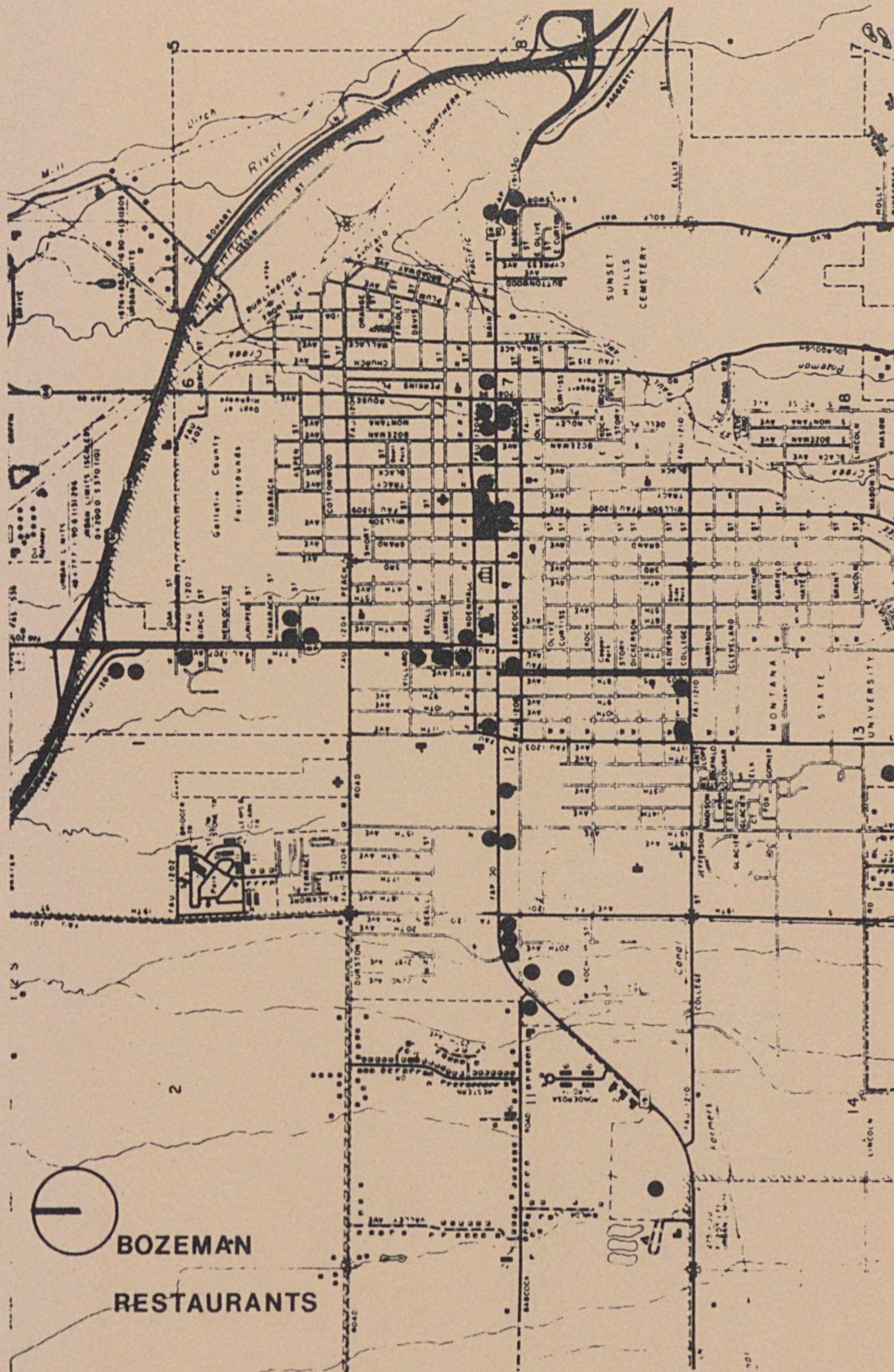
One of the primary reasons for locating the convention facilities in the downtown was the nearness and density of shops, restaurants, and lodging rooms near the site. If the convention center's primary task is to create activity which others might also benefit from, then they must be near the site of the activity.

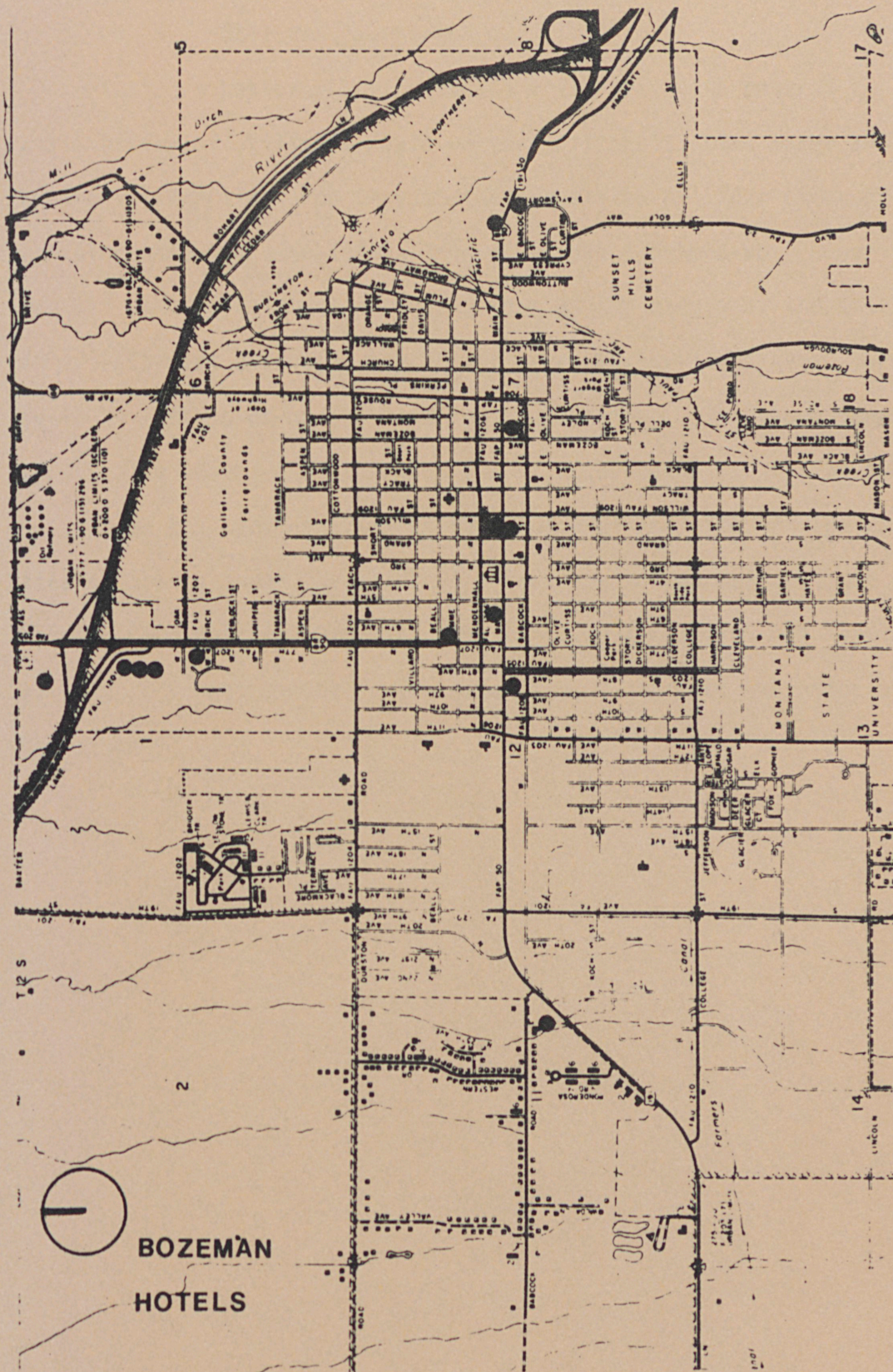
The rule for planning and sizing convention centers is to design the convention facilities for only twice as many people as there are rooms available in the vicinity. Within three blocks of the site there are 146 rooms and within a five block radius there are 86 more. The convention complex will have roughly 100 rooms and the facilities will be built to handle about 600 people.

There are approximately fifty restaurants in town and eight of them lie within a three block radius of the site, three of them on the site block. The facilities will also have a restaurant in them to help meet the needs which will be created.

The complex will contain some retail space but the area immediately east of the site, the CBD, will be depended upon to satisfy any real shopping urges of convention guests or their spouses.







IV. SITE CONDITIONS

D) Man-Made Site Characteristics

3. Utilities/Services

Finding a better place to locate a facility with regards to availability of utilities would be very difficult. The water and sanitary sewer lines run through the streets on all four sides of the block and area accessible from all sides for hook-up. Power is run through overhead wires running through the middle of the site in an east-west direction now, right over the service alley. They could be left up or buried with new construction. The storm sewer system also covers the site with the main collector running to the east under the service alley in the middle of the site.²¹ The gas line also runs under the alley.²² According to Don Barrick, the Bozeman City Building Official, the existing facilities can handle anything I'd want to put on the site without need for expansion of the systems.

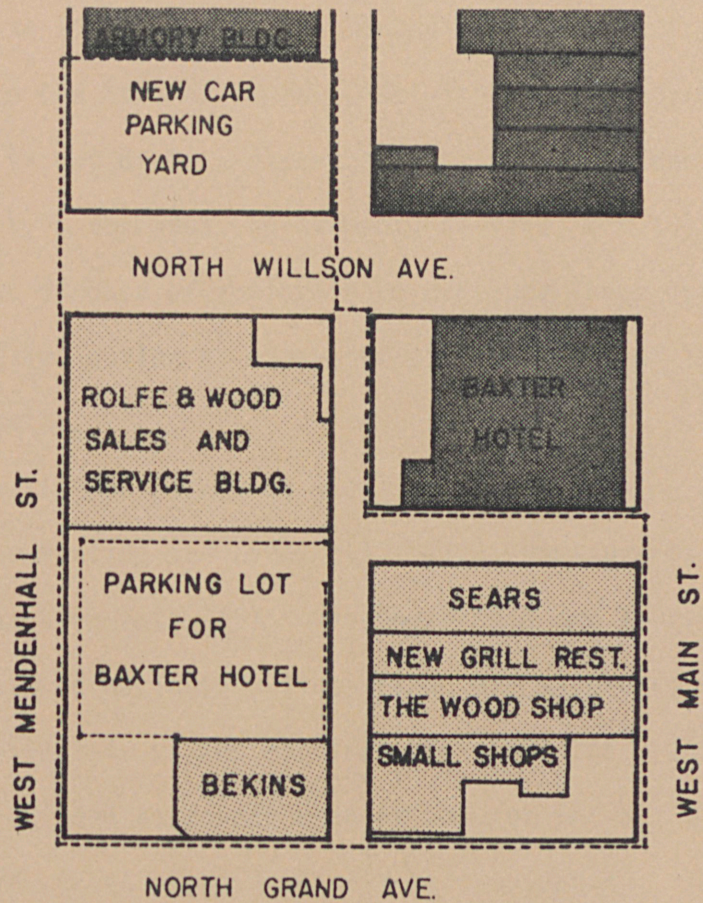
IV. SITE CONDITIONS

D) Man-Made Site Characteristics

4. Existing Structures

The block containing the site may be divided into four parts for purposes of discussion. The first part, the Baxter Hotel on the southeast corner of the block will be saved essentially as is though there should be at least an implied connection between the new convention center facilities and the old hotel. The second part of the block is on the northeast corner. This is where the Rolfe and Wood auto dealership is currently located in an old (30 years) brick building with a plastered front. This building, if it can't be worked into the complex, will be demolished. On the northwest corner in the third quarter of the block is another old brick building currently being used by Bekins for offices and storage. This building will be demolished if the need for space demands it. The last quarter of the block on the southwest corner is an accumulation of medium to small buildings housing retail stores at the moment. Any or all of these will be removed as deemed necessary.

To sum things up all structures on the block except the Baxter Hotel will be removed if it is necessary or incorporated into the new convention facilities if possible. The east-west service alley will be maintained and kept open, though the alley to the west of the hotel may be removed if necessary.



EXISTING SITE



EXISTING BUILDINGS OFF SITE



BUILDINGS ON SITE; TO BE REMOVED AS NEED DEMANDS

IV. SITE CONDITIONS

D) Man-Made Site Characteristics

5. Zoning

The site is located in the Central Business District (B-3). According to the Bozeman Zoning Code with regards to this area of town, "the intent of this district is to provide a central area for the community's business, government, service, and cultural activities."²³ The purpose of zoning is to preclude inappropriate uses from mixing and acting at odds against the intent of the city's planned growth.

On the list of permitted uses for the B-3 zoning district are: Hotels (10), Meeting and Lodge Halls (12), Restaurants and Cafes (21), and parking lots (15). Also permitted are Retail Sales (22), Professional and Business Offices (18), and Barber and Beauty Shops (3), all potential options for inclusion into the program.

Also included as zoning regulations for the B-3 district is required off-street parking and off-street loading. There are no minimum lot width or size requirements, and no minimum yard requirements. The whole site may be covered with the building providing the other code conditions are met.

IV. SITE CONDITIONS

D) Man-Made Site Characteristics

6. Building Code

This is a partial summary of the codes that may have some bearing on the design of the convention center facilities.

FIRE ZONE NO. 3

	<u>Fire Resistance of Exterior Walls</u>	<u>Opening in Exterior Walls</u>	<u>Min. of Two Exits if Occu- pancy Over</u>	<u>Square Feet per Occupant</u>	<u>Handicap Egress Provided</u>
<u>A-2.1</u>					
Assembly Room	2 hr. less than 10 ft. 1 hr. else- where	X* less than 5 ft. protected less than 10 ft.	50	7	Yes
Conference Room	"	"	50	15	Yes
<u>B-2</u>					
Restaurant	1 hr. less than 10 ft.	"	50	15	Yes
Commercial Kitchen	"	"	30	200	No
Retail	"	"	50	30	Yes
Office	"	"	30	100	Yes
<u>R-1</u>					
Hotel	1 hr. less than 5 ft.	X* less than 3 ft. protected less than 5 ft.	10	200	Yes

*X means Not Permitted

-One hour fire resistance required between Occupancy Types.

-Minimum width of 20 feet required access to public street.

<u>Occupancy Type</u>	<u>Construction Type</u>	<u>Max. Height in Stories</u>	<u>Area Permitted</u>
A-2.1	I F.R.	Unlimited	Unlimited
	II F.R.	4	30,000
	II 1 hr.	2	13,470
	III 1 hr.	2	13,470
	IV H.T.	2	13,470
B-2	I F.R.	Unlimited	Unlimited
	II F.R.	12	40,000
	II 1 hr.	4	18,000
	III 1 hr.	4	18,000
	IV H.T.	4	18,000
R-1	I F.R.	Unlimited	Unlimited
	II F.R.	12	30,000
	II 1 hr.	4	13,470
	III 1 hr.	4	13,470
	IV H.T.	4	13,470

EXITS:

-Floors above the first floor having an occupancy load of more than 10 shall not have less than 2 exits.

-Each mezzanine not used for storage, and greater than 2000 s.f. or more than 60 feet in any direction, shall not have less than 2 stairways to an adjacent floor.

-Every story or portion thereof having an occupant load of 500 to 999 shall have a minimum of 3 exits.

-The total width of exits in feet shall be not less than the total occupant load served divided by 50.

-If only two exits are required they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the building or area to be served measured in a straight line between exits.

-The maximum distance of travel to an exit shall not exceed 150 feet or 200 feet if the building is equipped with an automatic sprinkler system. This may be increased by 100 feet if the last 150 feet is in a corridor.

-Exits through an adjoining room are allowed only if there is a direct means of egress from the room.

-Exits shall not pass through kitchens, store rooms, rest rooms, closets, or spaces used for similar purposes.

-Main exits from buildings requiring egress by the physically handicapped shall be usable by individuals in wheelchairs and be on a level that would make the elevators accessible where provided.

-Exit doors shall swing in the direction of egress.

-Exit door requirements: Minimum height 6'-8", minimum width 3'-0", capable of opening at least 90 degrees, and mounted so that the clear width of the exitway is no less than 32 inches. No leaf of an exit door shall exceed 4 feet in width.

CORRIDORS:

- Partitions, rails, counters, etc. not over 5 feet in height shall not be construed to form corridors.
- Every corridor shall be not less in width than 44 inches.
- Corridors shall have a clear height of not less than 7 feet.
- Corridors shall be unobstructed for the required width.
- When more than one exit is required, they shall be so arranged that it is possible to go in either direction from any point in a corridor to a separate exit, except for dead ends not exceeding 20 feet in length.
- Construction of corridors shall be of at least 1 hour fire resistance for floors, walls, and ceilings.

STAIRS:

- Minimum widths: Occupant load of more than 50, 44 inches
" " of 50 or less, 36 inches
Private stair less than 10, 30 inches
- Rise and run: $7\frac{1}{2}$ " maximum riser, 10" minimum tread
- Every landing shall have a dimension measured in the direction of travel equal to the width of the stairway. If the stairs have a straight run then the minimum landing length shall be 4 feet.
- The maximum vertical distance between landings shall be 12'-0".
- Rails are required to be on either side of the stairway. If the stair width is greater than 88 inches then an intermediate rail is required, and one for each successive 88" of stairs.
- Rails must be between 30 and 34 inches above the nosing of the tread. The rails must extend a minimum of 6 inches beyond the ends of the stairs.
- In every building four or more stories in height, one stairway shall extend to the roof surface, unless the roof has a slope greater than four in 12.
- Minimum head room shall be 6'-6", measured from the nosing of the tread straight up.

RAMPS:

- Width, landing, and rail requirements are the same as stairs.
- Surfaces must be roughened or textured materials.

EXIT ENCLOSURES:

- There shall be no openings in exit enclosures except exit doorways and openings in exterior walls.
- Smoke proof enclosures in one of the required exits shall be required where a floor of any story is located more than 75 feet above the highest grade.

EXITS: GROUP A-2.1

- Every Group A-2.1 occupancy shall be provided with a main exit.
- The main exit shall be of sufficient width to accommodate one-half of the total occupant load but shall be not less than the total required width of all aisles, exit passageways, and stairways leading thereto, and shall connect to a stairway or ramp leading to a public way.

- Every auditorium shall be provided with exits on each side.
- Each side exit shall have sufficient width to accommodate one-third of the total occupant load served.

OPEN PARKING GARAGE:

- Construction type I or II.
- Construction must be on non-combustible materials.
- Minimum height with spiral of sloping floor shall be 9'-6".

<u>Type of Construction</u>	<u>Area per Tier (sq. ft.)</u>	<u>Height Ramp-Access</u>
I F.R.	Unlimited	Unlimited
II F.R.	125,000	12 Tiers
II 1 hr.	50,000	10 Tiers

<u>Distance from Property Line to Building</u>	<u>Fire Zone No. 3</u>
0'-10'	1 hour
10'-20'	none

SEISMIC CONSIDERATIONS:

-Equipment or machinery required for life safety systems or for continued operation of essential facilities shall be designed to resist force from any direction.

-The following mechanical and electrical equipment required by the section shall be designed in accordance with UBC Chapter 2312.

1. Elevator drive and suspension systems.
2. Standby power and lighting facilities.
3. Fire pumps and other fire protection equipment.

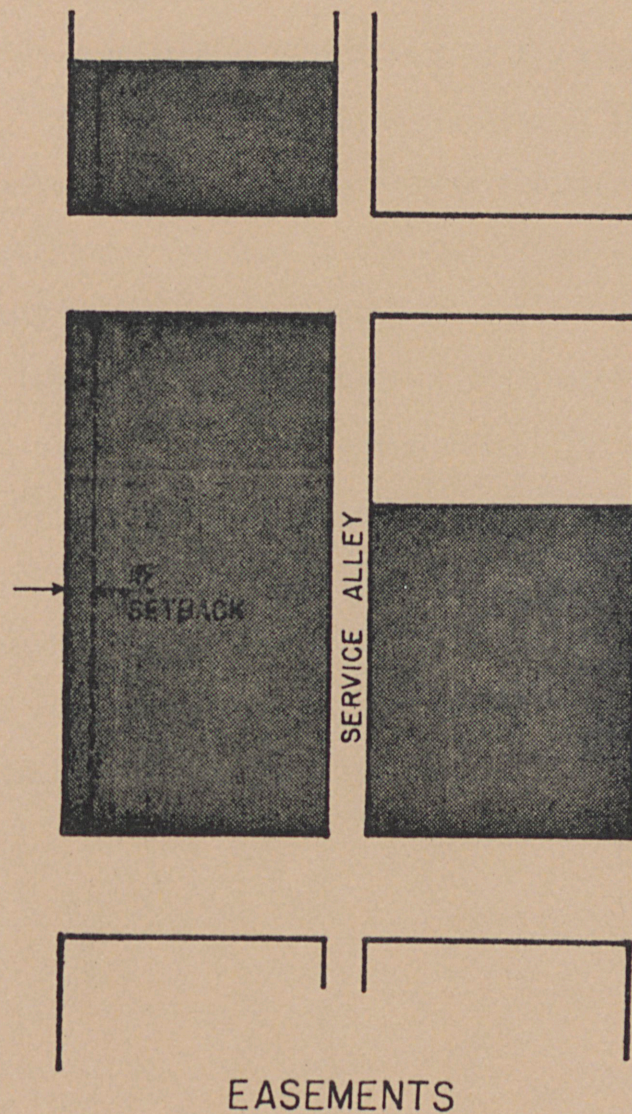
-Emergency telephones available to the public shall be provided at not less than every fifth floor in each required stairway.

IV. SITE CONDITIONS

D) Man-Made Site Characteristics

7. Easements

The site has only two restrictions on it: one, the alley going through it must be maintained as well as the storm sewer system below it, and two, a fifteen foot easement is required off Mendenhall.²⁴ Other than this there are no requirements dictating building locations.



IV. SITE CONDITIONS

D) Man-Made Site Characteristics

8. Nuisances, On & Off Site

In its current state the site has several nuisances. Most of them are visual in nature and will be rectified by demolition. These include the whole interior of the lot especially the alleys and the Baxter parking lot. The one other problem the site has is the service yard for the Baxter which will have to be dealt with.

Off-site nuisances are also present. Most noticeable is the traffic noise generated on Main Street by the regular traffic and the trucks. Mendenhall also causes problems of this nature. There is also a visual problem associated with the streets and their lack of street-scaping. The area to the east is basically acceptable in visual terms, but the blocks south and west are not really attractive. The block to the south contains the Imperial 400 Motel and Mother's Saloon. The motel is the problem. The owners have dealt with the problem somewhat by putting up a screening fence. More screening would be desirable. The block to the west is currently undeveloped and exposed parking lot. This problem is due to be remedied by the erection of the new Montana Bank building. The alleys, especially to the east are also not visual assets.

IV. ED

**VISUAL
ASPECTS**

IV. SITE CONDITIONS

E) Visual Aspects

From the ground level there are for all intents and purposes no views out of the city. The two-story buildings which line Main Street and the various buildings and trees which cover the town beyond in all directions limit vision to the immediate surroundings in the town. This would include: the streetscape, including sidewalks, street furniture, streets, and traffic, and the lower floors of the buildings including the lower store fronts, signs and display windows.

From the second floor and increasingly so the further you go up the view around the city slowly unfolds. To the north there is a fairly clear view of the Bridger Mountains, to the south Mt. Ellis and the Gallatin Range, and from the third story up the Tobacco Root Mountains can be seen.

IV. F)

**PROJECTED
IMPACT**

IV. SITE CONDITIONS

F) Projected Impact

A city is a form of life and as such it cannot be a static thing. A city can no more remain unchanging than a person could remain unaging. A living thing which cannot or will not change is actually stagnating. Stagnation tends to weaken life down to the point where life ceases to exist, death. This applies to all forms of life, plant, animal, people, and city. I cannot say if downtown Bozeman is on the road to stagnation or not, but if the convention center were in fact located downtown, and if it did in fact draw people, then the downtown will have achieved a breath of new life and be further away from stagnation and possible death than it was before.

With everything good there is always a negative side to be dealt with. In this case an influx of people to the downtown means an influx of cars and all their associated problems. Optimistically the convention center and its ancillary enterprises would draw people to the downtown to patronize the existing stores as well. Adequate parking for the new facilities will be provided but the parking situation for the rest of the downtown will be worsened. Unless they act in a coordinated manner to alleviate parking problems they will lose all of their potential gains in increased patronage to the difficulty of getting downtown to shop. This problem would have to be dealt with sooner or later; the convention center would only hasten the inevitable.

Along with an increase in parked cars there will be an increase in traffic and congestion problems. These problems as with the

parking problems would have come to a head eventually but a major development in the downtown area will bring them sooner but not precipitate them out of nothing.

Increased numbers of people are good for business yet people can cause problems too, just by their sheer numbers and its effect on the ability of businesses to handle them, and on the circulation within the downtown area. I would not anticipate throngs of people massing all over the sidewalks and clogging streets, but there will be a problem with increased traffic and pedestrian interaction which will have to be dealt with on a city wide scale. From an overall standpoint the bringing of more people downtown has very positive overtones but with potentially negative effects from the traffic and parking problems if they are not treated quickly and effectively.

On the side of more positive impacts, a convention center which caters to the local needs will draw people even when there are no out-of-town conventions being held. One of the primary points in locating the facility in the downtown area was to provide some spin-off business for the businesses already there and to eventually upgrade the area. People bring money and tend to attract more people. If something attracts people, then investors take notice and funnel capital into the area for improvements. The outlook is pretty idealistic yet it could prove if the convention center can draw the people. I don't see the new convention center as taking business away from any of the already established businesses with meeting/banquet facilities but rather fulfilling some of the increased need brought about the Conventions and Visitors Bureau as well as the local increases brought about by Bozeman's population

growth. The project is intended to fill a need rather than provide a substitution.

PROGRAM

V. PROGRAM

A) Introduction to Program

The program is a verbal description of the building. It covers in implicit or explicit language the relation of the building to the town and to the people it serves. It will describe the building's features and internal relationships without actually describing the physical building. It will present a set of physical and sensory criteria which it is felt will make the building a comfortable, efficient, and pleasant place to be in. Without these criteria or goals to design for, the actual success of a building would be much more of a hit and miss affair. With these goals in mind during the design process the chances of translating them into a workable building are greatly improved. The intent of this program will be to foster activity in the downtown area, to tie the convention center into urban Bozeman, and to create a pleasant and functional space for the people who will use it.

The convention center complex will consist of several parts each interrelated to the others, provide services for the guests and a profit potential for the owner. These major parts are: convention facilities for meetings and banquets of various sizes; hotel facilities for the convenience of guests attending multi-day conventions; a restaurant and coffee shop for the convenience of the guests and for the economic well being of the complex; and also limited retail and rental office space to provide ancillary services and economic feasibility to the complex during the slack periods between conventions. These various parts will be related in a composite form, each a distinct yet essential element to the whole.

The criteria provided in the program which follows this will be both sensory and physical in nature. The desired atmosphere or character will be stated, followed by the physical requirements of relationship, size, furnishings, and mechanical needs which are the physical elements used to create the desired atmosphere.

PROGRAM SUMMARY

CONVENTION AREA:

Convention Hall

Main Space: 400 @ 10 s.f./occ.	4000 s.f.
Meeting Rooms for . . . 100	1000
50	500
50	500
Convention Foyer	450
Convention Storage Room	200
Banquet Pantry	350
Service Closet	60
TOTAL:	7,060 s.f.

HOTEL:

Hotel Lobby and Reception Desk	1100 s.f.
Guest Rooms: 100 @ 500 s.f./room	50000
(350 s.f./rm. + 150 s.f./rm. for corridors and elevators)	
Offices:	
Manager's Office	140
Assistant Manager's Office	140
Secretaries Office	100
Accounting Office	150
Records Room (with vault)	200
Public Rest Rooms:	
Men's Toilet	150
Women's Toilet	100
Women's Rest Room	100
TOTAL:	52,180 s.f.

RESTAURANT:

Dining Room: for 120 @ 17 s.f./occ.	2040
Kitchen: 5 s.f./meal/hr.	1000
Receiving Room	180
Kitchen Manager's Office	150
Stewards Store Room	400
Beverage Store Room	180
China, Glass, and Silver Storage	300
Garbage Room	80
Employee Locker & Rest Rooms: 2 @ 125 s.f./ea.	250

RESTAURANT: (continued)

Employee Dining Room	220
Public Rest Rooms:	
Men's Toilet	150
Women's Toilet	100
Women's Rest Room	100
TOTAL:	5,150 s.f.

MAIN LOBBY AND RETAIL:

Main Lobby	600 s.f.
Retail Rental: 2 @ 1000 s.f./ea. (800 s.f. retail + 200 s.f. storage)	2000
Concession: 3 @ 200 s.f./ea.	600
Public Rest Rooms:	
Men's Toilet	150
Women's Toilet	100
Women's Rest Room	100
TOTAL:	3,550 s.f.

MECHANICAL: 25

Furnace Room (Boiler Room)	600 s.f.
Water Heater Tank Space	150
Fuel Storage	200
Transformer Vault	100
Refrigeration Compression Room	400
Fan Room, Ventilation Room	400
Hotel Furniture Storage	250
Maintenance Shops: (3)	
Plumbing-and-Electric Shop	200
Carpentry-and-Upholstering Shop	200
Paint-and-Varnish Shop	200
Linen Storage	350
Janitorial Service Room	150
TOTAL:	3,200 s.f.

PARKING:

391 cars @ 350 s.f./car	136,850 s.f.
(170 s.f. for parked car & 180 s.f./car for circulation)	
TOTAL:	136,850 s.f.

TOTAL SQUARE FOOTAGE FOR COMPLEX:

Building Area	71,140 s.f.
Parking Area	136,850
Combined Total	207,990 s.f.

V. PROGRAM

B) Convention Center

The convention center will be the focus of the design because it is this function which the other areas were created to serve. Flexibility will be the key to area as it will handle a wide variety of events from meetings of various sizes perhaps simultaneously held, to banquets, displays, dances, or receptions of various types. The size flexibility will be handled with movable partitions which will allow adjacent rooms of various sizes to be opened onto the main assembly hall or sealed off and used separately.

NAME OF SPACE: Convention Hall and Meeting Rooms

FLOOR AREA:

Main Space (400)	4000 s.f.
Meeting Room #1 (100)	1000
" " #2 (50)	500
" " #3 (50)	500

TOTAL: 6000 s.f.

USERS: Local and out-of-town people would use it on a rental basis. If it is being used as an exhibition hall by the renters then the general public would be allowed in. Access is controlled as needed.

PURPOSES: Meetings, banquets, exhibits, dances, receptions, anything an assembly hall could be rented for.

CEILING HEIGHT: 15 to 20 feet over the main area, 10 to 12 feet over the smaller meeting rooms.

LIGHTING REQUIREMENTS: Two types of lighting will be required for the space: one is area lighting, zone controlled, for the general space; and the other is a form of task lighting for viewing exhibits, spot lighting speakers, and other specific uses. It must be a flexible system. Indirect daylighting will be used for daytime area lighting. Direct sunlight and glare will be avoided.

HEATING, VENTILATING, AIR-CONDITIONING, EXHAUST: The assembly hall temperature will vary between 65 to 72 degrees Fahrenheit. The temperature will depend on the activity, active functions will require cooler temperatures for comfort than passive ones. Air changes will be from 6 to 8 per hour. Air movement will be between 20 and 40 feet per minute.

SUGGESTED MATERIALS FOR: (All materials and construction shall be in accordance to the restrictions of Fire Zone No. 3)

FLOORS: Ease of maintenance is a prime consideration.

The surface shouldn't be as hard as concrete nor as muffling as carpet. Wood or its equivalent would be best. Acoustical properties of floor shall be considered as well as the comfort of walking on it.

WALLS: Shall be constructed of the materials allowed in Fire Zone No. 3. There will be some absorption materials to cut down sound reflection. Acoustical considerations used in construction.

CEILING: Shall be sound absorbitive in nature, and light in color to help facilitate the area lighting in the room.

EQUIPMENT AND FURNITURE: Chairs and tables will be required to facilitate certain potential functions, audio-visual equipment should be available for use as need requires, and a portable podium or stage will be provided. Movable partitions will also be used.

SPATIAL RELATIONSHIPS: Two major areas shall have direct connections to the convention hall. They are the main lobby and the kitchen for banquet meals. Other areas existing to support the convention area a storage room, and a banquet pantry.

-Direct Connections: Main Lobby, Convention Foyer, Banquet Kitchen, Convention Storage Room, Banquet Pantry, Service Closet.

-Close Connections: Restaurant, Hotel, Rest Rooms.

COMMENTS: Flexibility is the key to the success of the convention area. An acoustical barrier must be found which will separate the meeting rooms from the main hall and yet be portable. The color of the main hall will be a neutral tone so as to provide a minimum of distractions to the various users. Active colors will be introduced through the chairs, tables, and other furnishings of the space.

NAME OF SPACE: Convention Storage Room

FLOOR AREA: 200 s.f.

USERS: Convention center employees

PURPOSES: For storing chairs, tables, the stage, and audio-visual equipment when it is not in immediate demand.

NAME OF SPACE: Banquet Pantry

FLOOR AREA: 350 s.f.

USERS: Convention center employees, banquet caterers

PURPOSES: For storage of items used primarily for banquets, plates, silverware, table cloths, service carts, hot trays, etc.

NAME OF SPACE: Service Closet

FLOOR AREA: 60 s.f.

USERS: Maintenance personnel

PURPOSES: Storage of cleaning implements

SPECIAL UTILITY REQUIREMENTS: Service sink

NAME OF SPACE: Convention Foyer

FLOOR AREA: 450 s.f.

USERS: Conventioneers and people using the convention hall or meeting room facilities.

PURPOSES: To provide an acoustical barrier between the public lobby and the convention hall. To provide a private area to conventioneers to relax while on a break. To serve as a control point for admittance into the convention hall and meeting facilities if needed.

CEILING HEIGHT: 10 to 12 feet

LIGHTING REQUIREMENTS: Area lighting, diffuse and low level. Day-lighting, direct and indirect would be acceptable. Task lighting near seating for reading if desired by users.

HEATING, VENTILATING, AIR-CONDITIONING, EXHAUST: Temperature range should be 68 to 72 degrees Fahrenheit due to the passive nature of activity in the room. Air changes will be 6 to 8 per hour. Air speed will be from 20 to 40 feet per minute.

SUGGESTED MATERIALS FOR:

FLOOR: Sound absorbing material, carpet

WALLS: Shall have acoustical treatment to absorb sound

CEILING: Shall be of a material which absorbs sound

EQUIPMENT AND FURNITURE: Lounge chairs and coffee tables will be the furnishings, as well as lamps for task lighting.

SPATIAL RELATIONSHIPS: Direct Connections: Public Lobby, Convention Hall, Rest Rooms

COMMENTS: The lobby will be a neutral color with accent color provided by furnishings and perhaps a tapestry. Passive color like blue will be used.

V. PROGRAM

C) Hotel Facilities

The key to the success of a hotel is said to be security.²⁶ The guests and their belongings must be safe, secure, and comfortable. They should not be subjected to the presence or excessive noise of outsiders unwanted within the confines of the hotel. For the convenience and comfort of the users the hotel is located within the same building as the convention center yet it is separate, having only one major entrance for easy surveillance by hotel staff. The hotel entrance and lobby are separate from the convention center entrance and lobby, yet they are connected inside. The offices for the management of the hotel and the convention center will be located together in the hotel's domain to centralize the management of the complex and to avoid uneconomical repetition of office facilities.

The hotel has two circulation systems, one for the guests and the public, and the other for the service staff. The two should not mix.

NAME OF SPACE: Reception Lobby

FLOOR AREA: 1100 s.f.

USERS: Hotel guests, people with business concerning the hotel, convention center, or the complex in general. General public not encouraged to assemble here unless on business or a social visit.

PURPOSE: A waiting room for guests and people on business. For surveillance of the hotel's main entry, and a meeting place and lounge for guests.

CEILING HEIGHT: 10 to 12 feet for the most part, lower over the desk and main entries and exits.

LIGHTING REQUIREMENTS: Low level area lighting with task lighting over seats if desired for reading. Daylighting both direct and indirect would be appropriate for atmosphere.

HEATING, VENTILATING, AIR-CONDITIONING, EXHAUST: Temperature range between 68 and 72 degrees Fahrenheit would be desired due to passive waiting room function. Air changes of 6 to 8 per hour will be provided, air moving at 20 to 40 feet per minute.

SUGGESTED MATERIALS FOR:

FLOORS: Shall be carpeted to provide sound absorbing surface.
WALLS: Shall be treated with sound absorbing materials.
CEILING: Shall be a light colored absorbing material.
EQUIPMENT AND FURNITURE: Lounge furniture shall be present including seats, tables and lamps. A drinking fountain will be in the area.

SPATIAL RELATIONSHIPS:

Direct Connections: Hotel rooms, Hotel Offices, Convention Center Lobby, Rest Rooms.
Close Connections: Convention Center, Restaurant, Parking.
COMMENTS: The lobby should have a restful and comfortable atmosphere. The color scheme will be neutral with warm accent colors supplied by the furnishings. The lobby gives the first and most lasting impression of the hote. It should be well thought out.

NAME OF SPACE: Guest Rooms

FLOOR AREA: 100 rooms @ 500 s.f./room
(300 s.f./rm. + 150 s.f./rm. for corridor and elevators) 50,000 s.f.

USERS: Hotel guests and their visitors.

PURPOSE: A place to sleep for hotel guests, and some available large enough to hold small private meetings.

CEILING HEIGHT: 8 to 9 feet, 7½ to 8 feet for the bathrooms

LIGHTING REQUIREMENTS: Area lighting shall be provided with task lighting at bed and over tables. Direct sunlight should enter the room at least once a day.

HEATING, VENTILATING, AIR-CONDITIONING, EXHAUST: Air temperature shall be between 68 and 72 degrees Fahrenheit, lower at night if the guest desires. Air changes will be at 6 to 8 per hour in bedroom. Air changes will be 8 to 10 per hour in bathrooms. Operable windows will be included for the guests' convenience. Exhaust fans provided for bathroom, activated on occupancy.

SUGGESTED MATERIALS FOR:

FLOORS: The floor shall be carpeted to minimize noise in the bedroom area. The bathroom shall have a water proof floor of linoleum with bath mat throw rug.

WALLS: Bedroom shall have acoustical treatment to minimize transmission of noise. Bathroom shall be finished smooth for personal protection and for ease of maintenance.

CEILING: Bedroom ceiling shall be of an acoustically absorbant material. Bathroom shall be smooth for ease of maintenance and lower to 7½ to 8 feet in height.

EQUIPMENT AND FURNITURE: Bedroom furniture shall include beds, double, twin, and singles as needed, dressers, chairs, a table, T.V., pictures, lamps, and mirrors. A built-in closet shall be provided for each guest room. Bathrooms shall be equipped with a water closet, lavatory, and shower. Bathtub/showers will be provided for handicap rooms.

SPECIAL UTILITY REQUIREMENTS: Acoustical insulation provided in the construction of the rooms and corridors.

SPATIAL RELATIONSHIPS:

Direct Connections: Hotel Lobby, Corridors, and Emergency exits.

Close Connections: Restaurant, Convention Center, Parking.

ORIENTATION: All rooms shall be exposed to direct sunlight at least once a day.

COMMENTS: The rooms shall all be a neutral color with accent color provided by the furnishings. All rooms will have the same color scheme. The total effect should be calm and restful.

NAME OF SPACE: Offices

FLOOR AREA:

Manager's Office	140 s.f.
Assistant Manager's Office	140
Secretary's Office	100
Accounting Office	150
Records Room (with vault)	200

TOTAL: 730 s.f.

USERS: Hotel and convention Managers and employees. Visitors with business with the complex.

PURPOSE: To house the business end of the complex.

CEILING HEIGHT: 8 to 10 feet.

LIGHTING REQUIREMENTS: Area lighting for rooms with specific task lighting over work areas. Daylighting should be accessible.

HEATING, VENTILATING, AIR-CONDITIONING, EXHAUST: Air temperature shall be between 68 and 72 degrees Fahrenheit. Air changes shall be 6 to 8 per hour. Air movement will be 20 to 40 feet per minute.

SUGGESTED MATERIALS FOR:

FLOOR: Carpeted to absorb sound

WALLS: Acoustically treated to reduce sound reflection, glass used in fair amounts for both surveillance and light.

CEILING: Shall be sound absorptive material.

EQUIPMENT AND FURNISHINGS: Furnishings shall consist basically of chairs, desks, tables, file cabinets, lamps, and pictures.

SPECIAL UTILITY REQUIREMENTS: A built-in vault will be provided to store important records and documents as well as the valuables of the guests.

SPATIAL RELATIONSHIPS:

Direct Connections: Hotel Lobby (controlled public access)

Close Connections: Convention Facilities, Restaurant, Rest Rooms.

ORIENTATION: Daylighting will provide area lighting for office where practical and desirable.

COMMENTS: The offices will have a neutral color base with warm accent colors provided in the furnishings.

V. PROGRAM

D) Food and Drink Service Facilities

The role of the restaurant in the convention center complex is to provide meals for the conventioners, hotel guests, and the general public. With the kitchen for catering banquets it would be almost wasteful to let it sit empty between conventions and banquets. It is a potential source of revenue for the complex and as such could not reasonably be avoided. The idea is not to provide all meals for all the guests and visitors but to be of such a size that it could handle a reasonable number of them plus some of the general public. The 7 or 8 other restaurants within three blocks could also expect to get some of the business from the conventioners and hotel guests. No attempt is being made to monopolize the restaurant business.

The restaurant includes all parts of the food preparation process, from the receipt of the raw food stuffs to the serving of the finished products in the dining room. Also included in the restaurant are the offices required for use by the kitchen management. All of the areas are essential to the running of a restaurant.

NAME OF SPACE: Dining Room

FLOOR AREA: For 120 occupants @ 17 s.f./occ. = 2040 s.f.

USERS: Conventioneers, hotel guests and general public.

PURPOSE: A pleasant and convenient place to serve meals. Use will be primarily for the users' benefit.

CEILING HEIGHT: 10 to 12 feet over large areas, 8 to 10 feet over the smaller areas.

LIGHTING REQUIREMENTS: Area lighting will be indirect and centered primarily over the circulation paths. Higher lighting levels will be possible at some tables. The lighting is arranged in a zone system and is on rheostat control.

HEATING, VENTILATING, AIR-CONDITIONING, EXHAUST: Air temperature will ideally be from 68 to 72 degrees Fahrenheit. Air changes will be 6 to 8 per hour, air speed will be 20 to 40 feet per minute, quick enough to provide good ventilation but not so fast as to constitute a breeze.

SUGGESTED MATERIALS FOR:

FLOOR: Shall be a mixture of hard and soft surfaces to define zones and for ease of maintenance. Acoustics are a concern.

WALLS: Two concerns shall dominate the wall details, they are: sound absorption and maintenance.

CEILING: A sound absorptive material will be used.

EQUIPMENT AND FURNISHINGS: The restaurant shall have several types of seatings; counter, table, and booth. Seating and tables will be the primary furnishings in the dining area. A salad bar table may be included. Coat racks provided by tables.

SPATIAL RELATIONSHIPS:

Direct Connections: Kitchen, Main Lobby, Rest Rooms (screened entries).

Close Connections: Convention Center, Hotel, Parking

ORIENTATION: Sunlight will be used for area lighting.

COMMENTS: The restaurant will have a neutral tone base with warm accent colors provided by the furnishings. Of the several types of seating there will be counter service and tables for short order type meals and table service for a more formal meal. Limited bar facilities will also be considered.

NAME OF SPACE: Kitchen

FLOOR AREA: 5 s.f./meal/hour = 1000 s.f.

USERS: Kitchen employees only

PURPOSE: To prepare food for banquets and restaurant patrons.

CEILING HEIGHT: 10 to 12 feet

LIGHTING REQUIREMENTS: Specific task lighting required over each work station. General lighting by zone control system.

HEATING, VENTILATING, AIR-CONDITIONING, EXHAUST: Air temperature should ideally be from 65 to 70 degrees Fahrenheit due to the activity of the area. Air changes 6 to 8 per hour generally with exhaust fans placed over critical areas.

SUGGESTED MATERIALS FOR:

FLOORS: Maintenance is primary consideration.

WALLS: Maintenance is primary consideration.

CEILING: Maintenance and acoustics are primary considerations.

EQUIPMENT AND FURNITURE: Required equipment is very specific in nature. On a broad scale the equipment needed includes; stoves, ovens, steam warmers, counters, sinks, refrigerators, freezers, grills, dishwashers, and a myriad of pots, pans, bowls, and utensils to name but a few.

SPECIAL UTILITY REQUIREMENTS: The design must flow from one work area to the others to efficiently put out quality food in whatever quantity is demanded.

SPATIAL RELATIONSHIPS:

Direct Connections: Dining Area, banquet hall, banquet pantry, receiving room/service alley, kitchen manager's office, stewards storage room, beverage store room, china glass and silver storage.

Close Connections: Garbage room, employee locker rooms and rest rooms, employee dining room, employee entrance, service/mechanical shops.

NAME OF SPACE: Receiving Room

FLOOR AREA: 180 s.f.

USERS: Delivery men

PURPOSE: Protect deliveries from environment, stray animals, and people.

NAME OF SPACE: Kitchen Manager's Office

FLOOR AREA: 150 s.f.

USERS: Kitchen Manager and Assistant Manager

PURPOSE: Center for restaurant and banquet planning and coordination of services.

NAME OF SPACE: Stewards Store Room

FLOOR AREA: 400 s.f.

USERS: Steward and employees of kitchen

PURPOSE: Storage of dry foodstuffs, canned goods, vegetables, dairy products, and meat.

EQUIPMENT AND FURNISHINGS: Platforms, shelves, refrigerators, and freezers.

NAME OF SPACE: Beverage Store Room

FLOOR AREA: 180 s.f.

USERS: Kitchen employees -- restricted access

PURPOSE: To store beverages from soft drinks to mild to liquors and beer.

NAME OF SPACE: China, Glass and Silver Storage

FLOOR AREA: 300 s.f.

USERS: Kitchen employees

PURPOSE: Storage of non-food items

NAME OF SPACE: Garbage Room

FLOOR AREA: 80 s.f.

USERS: Kitchen employees

PURPOSE: Place to store garbage out of kitchen and before it is picked up.

NAME OF SPACE: Employee Locker Rooms and Rest Rooms

FLOOR AREA: 2 @ 125 s.f. each = 250 s.f.

USERS: Kitchen employees

PURPOSE: Storage of street clothes and work clothes, and toilet facilities for employees.

NAME OF SPACE: Employee Dining Room

FLOOR AREA: 220 s.f.

USERS: Employees of convention center complex

PURPOSE: Private dining for employees and employee meeting room.

V. PROGRAM

E) Main Lobby and Retail Facilities

The Main Lobby is the focal point of the whole complex. Everything is accessible from it, the restaurant, shops, convention facilities and the hotel. The hotel is the only part of the complex which does not have an entrance directly in through the lobby, but there is an open connection inside to the hotel lobby. The lobby will create the first and most lasting impression of the complex to the visitor. For this reason special care must be taken to design it carefully. Directions to the various areas must be clear and easily accessible from here. The space itself should be a pleasant space to be in having both places of action and places for watching the action out of the mainstream.

The purpose of the retail rental space is to bring more income to the convention complex on a steady basis. Ideally the services provided would be in keeping with the needs of a traveling clientele such as those attending a convention from out-of-town or staying in the hotel for the night.

NAME OF SPACE: Main Lobby

FLOOR AREA: 600 s.f.

USERS: General Public

PURPOSE: Serves as main entry to convention facilities, restaurant, and retail space and as a unifying element which ties the complex together. Multi-transitional space, active and passive areas.

CEILING HEIGHT: 10 to 15 feet, variable height.

LIGHTING REQUIREMENTS: Area lighting under zone control. Daylight will provide area light for the bulk of the daytime hours.

Task lighting may be employed for use over selected seating.

HEATING, VENTILATING, AIR-CONDITIONING: Air temperature will be from 65 to 70 degrees Fahrenheit. Air changes will be from 3 to 4 per hour. Air speed will be from 20 to 40 feet per minute.

SUGGESTED MATERIALS FOR:

FLOOR: Easy to clean surface over active areas and carpet over the passive areas with the seating.

WALLS: Shall have some acoustical treatment.

CEILING: Shall have some acoustical treatment.

EQUIPMENT AND FURNITURE: The area shall be equipped with a drinking fountain, public seating, and possibly planters.

SPECIAL UTILITY REQUIREMENTS: The design must offer a clear self-evident path to the various parts of the complex.

SPATIAL RELATIONSHIPS:

Direct Connections: Convention Foyer, Restaurant, Hotel Lobby, Retail, Parking, and Public Rest Rooms.

ORIENTATION: The area will front on Main Street to give focus from the complex to the rest of the town and to receive the south light.

COMMENTS: The lobby should offer an invitation to come in from the outside, the inside should follow up on this and make the entries to the convention center, hotel, and retail attractive also. The color of the lobby will be a neutral tone base with accent colors to mark the various paths to the facilities provided by the convention center complex.

NAME OF SPACE: Retail Rental

FLOOR AREA: 2600 s.f.

2 retail rentals @ 800 s.f. with 200 s.f. storage

3 concession spaces @ 200 s.f. each

USERS: General public and conventioners and hotel guests.

PURPOSE: To give the center a measure of economic stability by providing a steady fixed rental income. To serve the guests with needed amenities.

CEILING HEIGHT: 10 to 12 feet

LIGHTING REQUIREMENTS: Area lighting and flexible task lighting system shall be provided.

HEATING, VENTILATING, AIR-CONDITIONING, EXHAUST: Air temperature shall be from 65 to 70 degrees Fahrenheit. Air changes shall be from 6 to 8 per hour, air speed shall be from 20 to 40 feet per minute.

SUGGESTED MATERIALS FOR:

FLOOR: Finish dictated by type of rental client.

WALLS: Finish dictated by type of rental client.

CEILING: Shall be acoustically treated.

SPECIAL UTILITY REQUIREMENTS: Flexible task lighting system.

SPATIAL RELATIONS:

Direct Connections: Main Lobby

Close Connections: Convention Center, Hotel, Restaurant, Parking, Public Rest Rooms.

COMMENTS: The finish shall be dictated by the needs of the renters.

Signage will be subject to the approval of the complex manager.

V. PROGRAM

F) Mechanical

Behind every comfortable building there is a power plant of some sort to keep the air at the proper temperature and speed, the humidity at the proper level, and the water flowing at the desired temperatures. The system is essential to any modern building to achieve the desired levels of comfort. Rarely is the public ever aware of the workings of the mechanical systems and that is the way it should be. These areas will for the most part be in the basement of the complex, accessible to service from the alley out of the main public view. The following rooms and sizes are for a hotel for 100 with a restaurant and some meeting rooms. The source was "Time Saver Standards" and an article by Morris Lapidus on Hotel Design.

<u>NAME OF SPACE:</u>	<u>FLOOR AREA:</u>
Furnace Room (Boiler Room)	600 s.f.
Water Heater Tank Space	150
Fuel Storage	200
Transformer Vault	100
Refrigeration Compression Room	400
Fan Room, Ventilation Equipment	400

NAME OF SPACE: Hotel Furniture Storage

FLOOR AREA: 250 s.f.

USERS: Hotel maintenance staff

PURPOSE: To store extra, alternate, or broken furniture waiting to be repaired.

NAME OF SPACE: Maintenance Shops (3)

-Plumbing and Electrical Shop

-Carpentry and Upholstering Shop

-Paint and Varnish Shop

FLOOR AREA: 3 @ 200 s.f./each 600 s.f.

USERS: Complex maintenance employees

PURPOSE: To facilitate the operation of the complex and the physical plant. Different shops are due to incompatible functions.

NAME OF SPACE: Linen Storage

FLOOR AREA: 350 s.f.

USERS: Hotel staff

PURPOSE: Storage of linen and accessories for beds.

NAME OF SPACE: Janitorial Service Room

FLOOR AREA: 150 s.f.

USERS: Janitorial staff

PURPOSE: Storage of cleaning tools and supplies

EQUIPMENT AND FURNISHINGS: Service sinks and shelves

V. PROGRAM

G) Parking

Parking requirements for the complex require almost the whole site for ground-level parking. Because of this a parking garage has been decided upon to minimize the effect of the heavy influx of cars to the site and the complex. The less area taken by cars on the site, the more may be used for people.

NAME OF SPACE: Parking Garage

PARKING PLACES REQUIRED FOR SPECIFIC USES:

Baxter Hotel: replacement	50
Convention Hotel: 1/room	100
Restaurant: 1/2½ seats	45
Convention Center: 1/2½ seats	240
Retail: 1/250 s.f.	12
Employees: Maximum number of employees working at one time: 47 employees, total 40 spots allotted.	40
TOTAL:	487

ASSUMED REDUCTION

of 25% for repetition
excluding Baxter and

employees 391

FLOOR AREA:

391 cars @ 350 s.f./car = 136,850 s.f.

USERS: Guests, visitors, and employees of the complex

PURPOSE: To provide off-street parking for cars using the facilities of the convention center complex.

CONCEPTUAL ALTERNATIVES

VI. CONCEPTUAL ALTERNATIVES

A) #1

The first alternative I will explore is the mediumrise building. By this I don't mean 10 to 20 stories high but rather about six. This is out of deference to the Baxter which is a recognized local landmark and in keeping with other buildings in town which do occasionally go higher than 2 to 4 stories. The area demands of the complex also make it unfeasible to go above about six stories.

In this proposal the convention center, restaurant, and hotel would be located in what is clearly one building bounded by the Baxter Hotel, Grand Avenue, Main Street, and the alley. The north half of the block would be devoted to the parking garage accessible from either Mendenhall, Grand Avenue, or Willson Avenue. A series of sky bridges would connect the complex to the parking garage. Landscaping would be used to make the ground level near the garage a more pleasant place to be. Extra room on the block could be considered for more retail space if it is desired, possibly for relocation of some stores dislocated by the center.

The relationship of the complex to the Baxter would be similar to the one used between other buildings in town. It will not be subservient to the Baxter's design but neither will it dominate. It will make a statement of its own in keeping with "urban" Bozeman. Connections between the complex and the Baxter will be made, though not indoors. The lower floor of the complex will hold most of the activity generated by the complex and this will facilitate the spillover to the Baxter and the rest of the downtown. The two Bozeman high rises will create a definite edge to the current Central

Business District. The complex will, in effect, reinforce the western boundary.

VI. CONCEPTUAL ALTERNATIVES

B) #2

Alternative number two will be for the creation of a lowrise complex between two and three stories high. This would cover more of the block and be in keeping with the height of greater Bozeman. The complex would of necessity be more spread out and in this way utilize the block more fully by taking advantage of its inherent assets of four-sided exposure and service hook-ups. This would also create a building with a scale which would be much more favorable to people than expediency.

Links with the Baxter would be conceivably much easier if the complex in effect surrounded the old Hotel. Development, or redevelopment of the north side of the Hotel would be possible with a better chance of success.

Access to the site would be just as easy with this approach as with the highrise approach, except now all sides have some potential rather than just the three away from Main Street.

Design in keeping with "urban" Bozeman would be easier with this approach because the scale is so much closer to that of the rest of the town.

VI. CONCEPTUAL ALTERNATIVES

C) #3

A third approach to the problem would be to keep and renovate all of the exiting buildings that could possibly be used in some way or another with the complex. Displacement of businesses will still take place but the buildings could be saved, renovated, and as need dictates, added on to. This would help preserve some of Bozeman's connection with the past and give the complex and the block the sense of diversity which is usually found in a city's urban core. This is not entirely inconsistent with the desire for a unified complex; it all depends on how the connections are handled as to how well it will work.

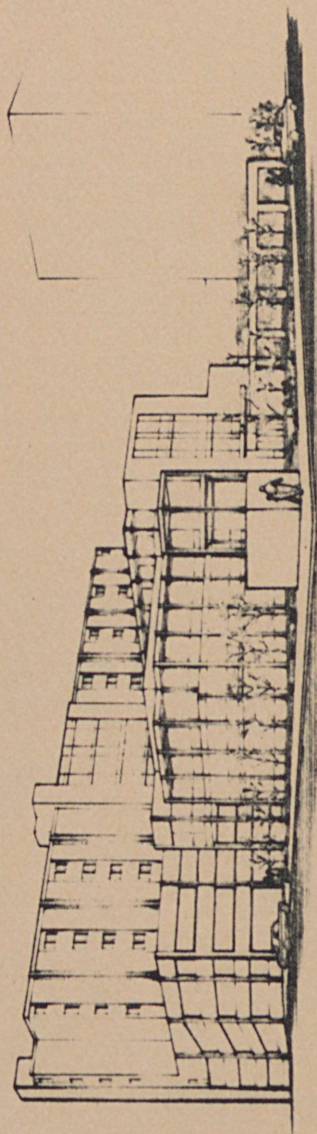
To fit all the required parking on the site some of the existing buildings will have to give way to a parking garage capable of handling the new requirements. New buildings of some sort must clearly state that something new or at least different is going on here now.

FOOTNOTES

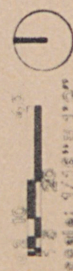
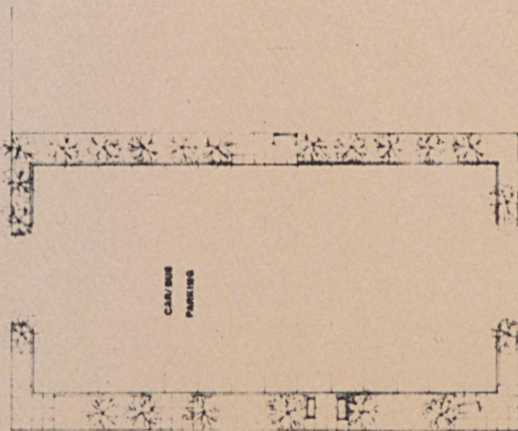
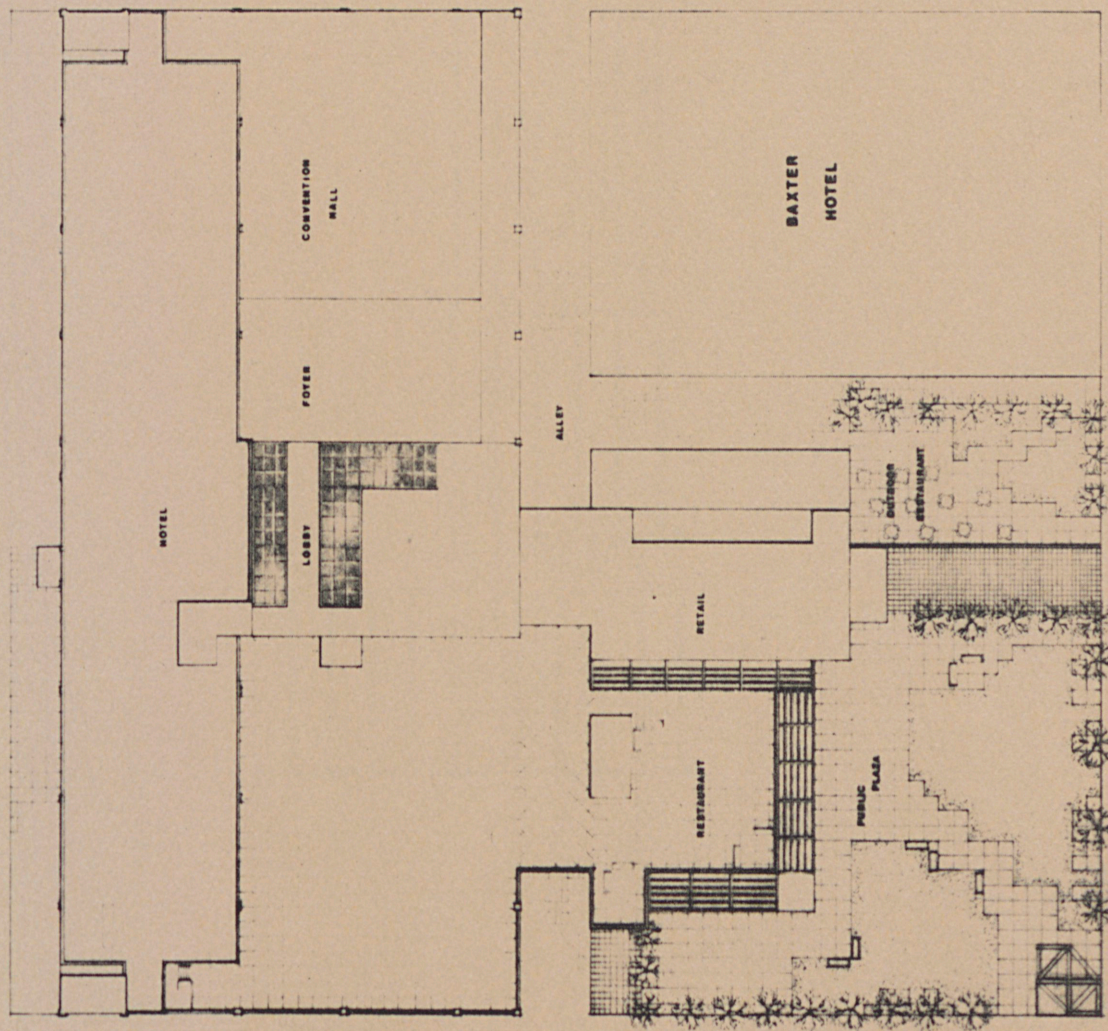
FOOTNOTES

1. Pamphlet by Bozeman Area Chamber of Commerce "Travel Promotion Pamphlet"
2. Pamphlet by Bozeman Area Chamber of Commerce "Travel Promotion Pamphlet"
3. Pamphlet by Bozeman Area Chamber of Commerce "Travel Promotion Pamphlet"
4. Interviews with: Sam Currie, Co-Director of Strand Union Building, Food Service; and Sherry Johnson, Sales Manager, Holiday Inn, Bozeman.
5. Interview with: Dick Jones, Manager of Bozeman Elks Club
6. Burlingame, Merrill G., Dr., Gallatin County's Heritage, p. 2
7. Pamphlet by Bozeman Area Chamber of Commerce
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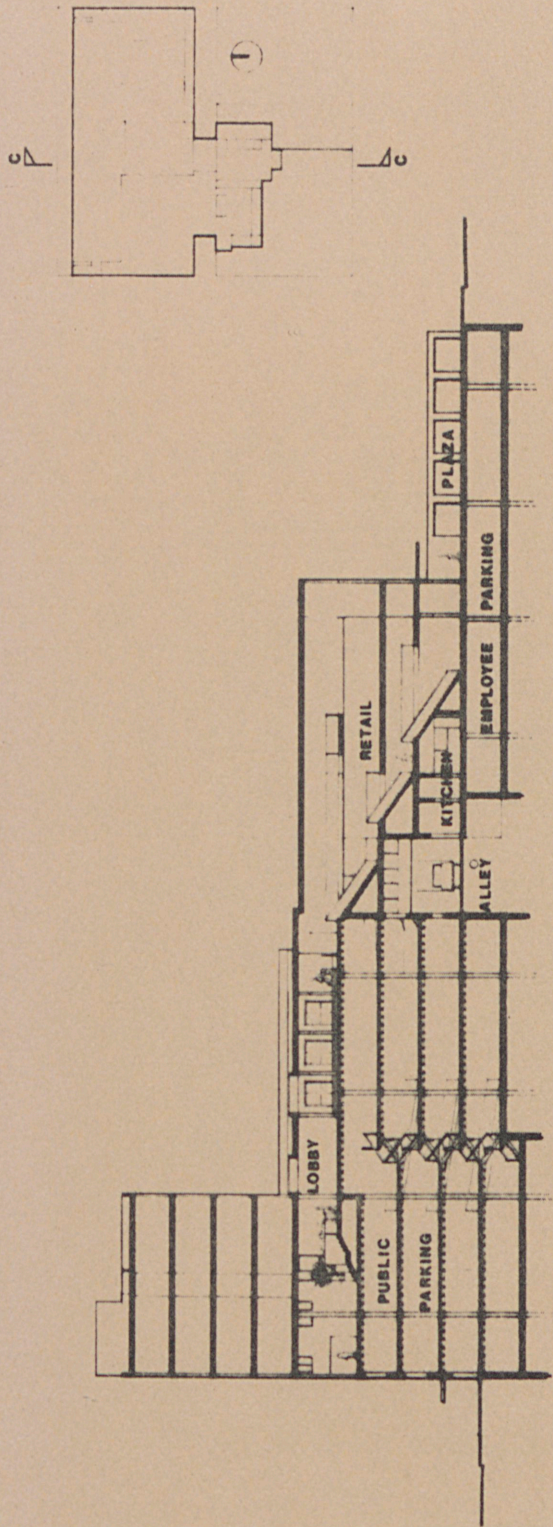
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21. Utility maps for City of Bozeman, Bozeman City Building
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22. Utility map for City of Bozeman, Montana Power Company
23. Bozeman Zoning Code, Chapter 18.48.010
24. Interview with: Don Barrick, City Building Official,
Bozeman
25. Time Saver Standards: Building Types, p. 747
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p. 38



VIEW FROM MAIN STREET



SITE/ROOF PLAN

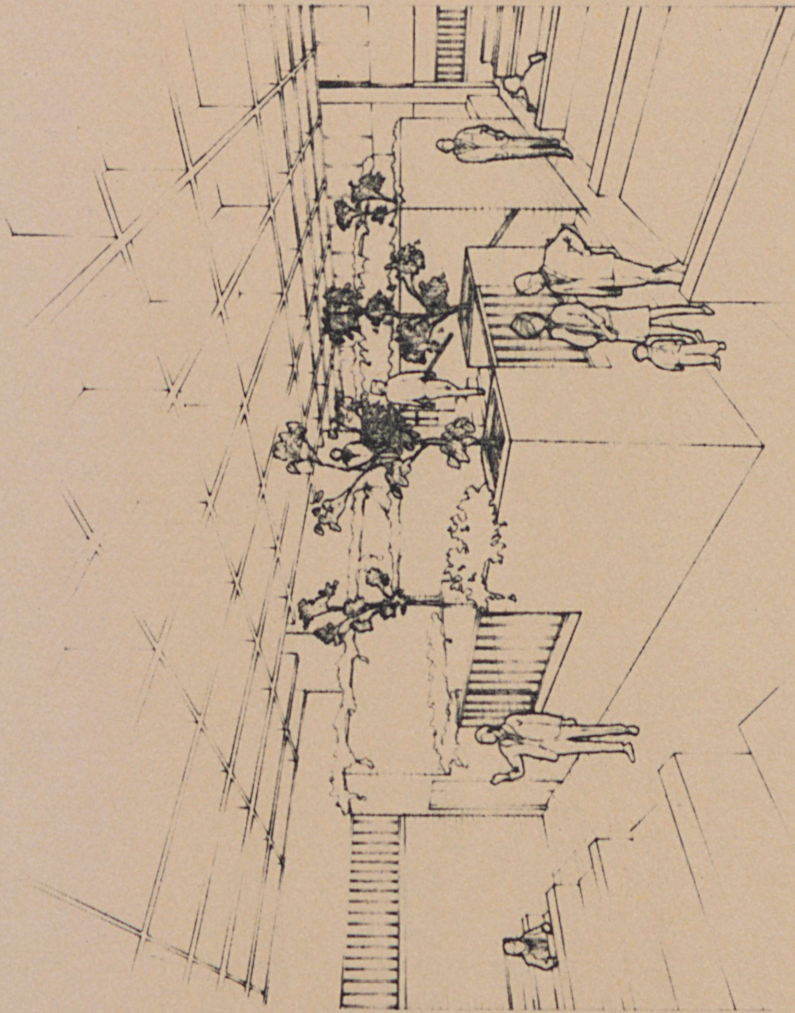


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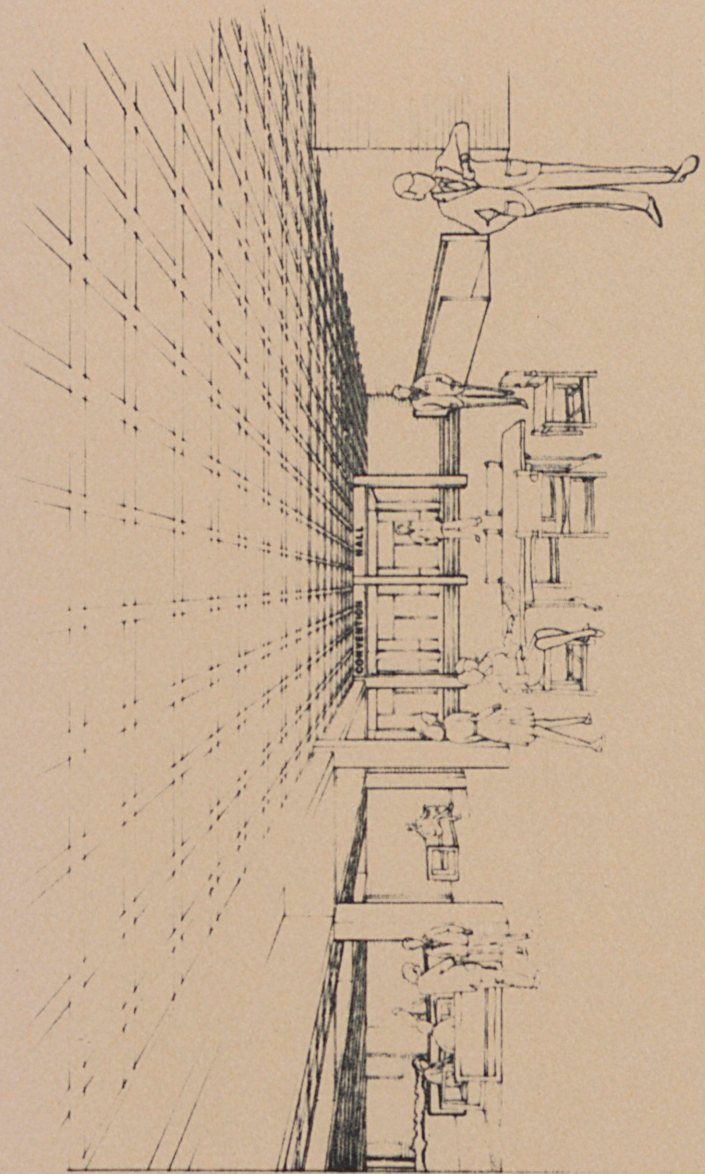
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SECTION

11



RESTAURANT



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