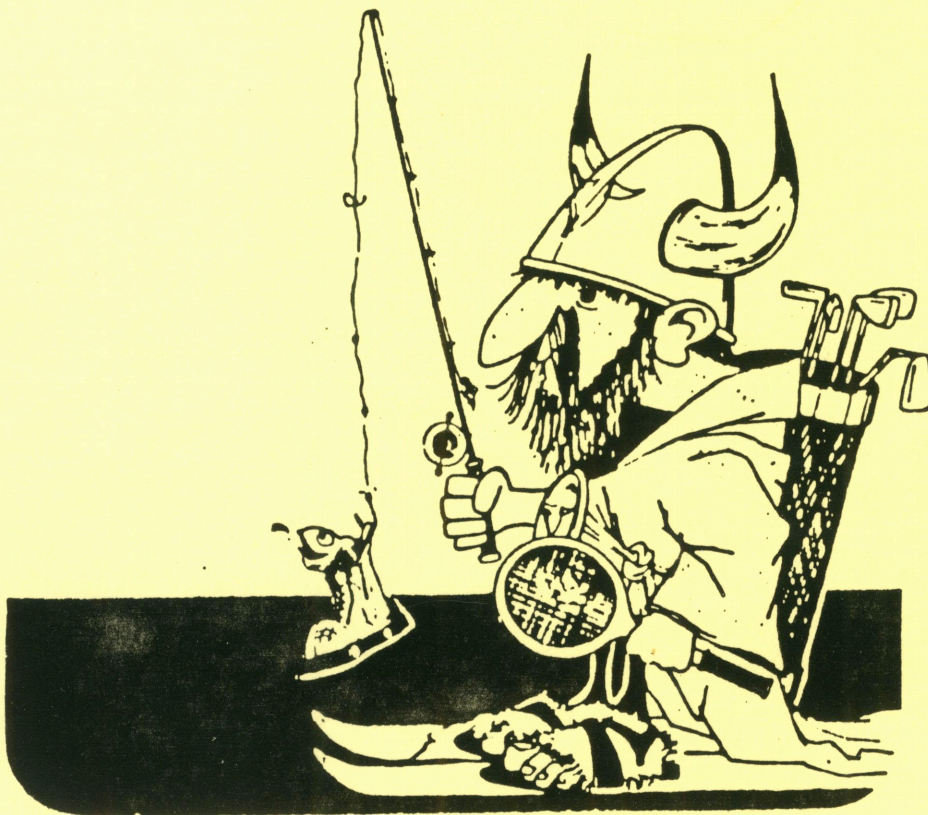




THE VIKING LAKESHORE INN

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Bozeman

VIKING CONVENTION HOTEL DEVELOPMENT

by

Mike Miller

A programming document submitted in partial fulfillment
of the requirements for the degree

of

BACHELOR OF ARCHITECTURE

Approved by:

Advisor

Thesis Coordinator

Director, School of Architecture

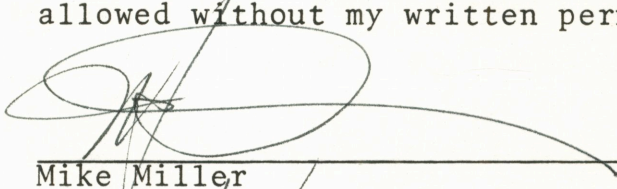
MONTANA STATE UNIVERSITY
Bozeman, Montana

December 1986

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Mike Miller

22/12/86

Date

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PREFACE: EDUCATIONAL GOALS

PREFACE: EDUCATIONAL GOALS

The following goal statements are included in this document to serve as a general outline of those aspects of the field of architecture into which I would like to gain some insight throughout the Thesis I and Thesis II program. By adhering to a set of personal goals I hope to establish a solid guide by which I can evaluate my progress and resulting achievements.

- o To understand those implications and peculiarities involved in the area of resort architecture, as this is a project type I am interested in pursuing in the future.
- o To clarify in my mind the "complete" architectural process, from client/architect contact to programming methodology and pre-design through design synthesis to schematic presentation.
- o To formulate, understand and follow a workable methodology for analyses and synthesis generation.
- o Through the completion of the above goals as well as maintaining a developer/designer relationship throughout the project, understand the role of the developer and how that developer affects the introduction and outcome of a project.

STATEMENT OF PROJECT:

- O PROJECT NEED
- O PROJECT SCOPE
- O PROJECT FOCUS
- O CLIENT CONSIDERATIONS

STATEMENT OF PROJECT

PROJECT NEED:

There is a current demand for 2,450 beds per night during the ski season. The summer season may approximate the winter season. This demand is projected to rise to 5,423 by 1992, according to the Big Mountain Ski Area's Master Plan. There currently exist 1,080 beds on the mountain, and 1,802+ in Whitefish, not including timesharing facilities. The growth plan for Big Mountain will add approximately 1,620 beds by 1992 to those now existing. The Viking Project may add as many as 1,078 additional beds, bringing the total to perhaps as many as 5,872+ in the Whitefish area. In addition, other hotel/motel/timesharing/condominium projects will undoubtedly be constructed in the area. At the minimum, four other major hotel/convention complexes are in the early stages of planning. However, it should be pointed out that apparently only 80% of the beds on Big Mountain and 47% of the beds in Whitefish are attributable to skiers during the ski season. The mountain anticipates approximately three times as many skiers by 1992, so even the projected, known number of beds to be added will leave room for the additional development of hotel/motel facilities, as well as the construction of recreational condominiums that will be available by the night or by the week.

(Source: From a report prepared by Jerry Hanson, Property Consultant, Whitefish, Montana, 1984.)

(Note: Additional justification for this project is related in the section titled "Project Feasibility/Cost Analyses" in this document.)

PROJECT SCOPE:

The scope of this project is to include:

- o Programming and analyses, and implementation of facilities required for a 300-room convention hotel above and beyond those specifically requested by client/developer.
- o Full site development, to include:
 - on-site parking
 - marina
 - beachfront
 - all open areas
- o Precedent research, for spatial sizing
- o Design of hotel/convention facilities to include room layouts, administration, public and convention facilities.

The scope of this project will not include:

- o Specific design of kitchen or laundry facilities other than aspects of adjacencies, circulation, spatial allotments.
- o Additional off-site parking areas unless they need to respond directly to the architectural solution.

- o "Detailed" sizing of mechanical systems, lighting and structure, although if it is found that any of these may radically affect certain aspects of the architectural solution(s) they may well be included within the scope of this project.

PROJECT FOCUS:

Focus will primarily be on the design of the hotel, organization, image, circulation patterns, form and materials, as well as its relationship to the site and surrounding areas. Attention will also be paid to an efficient marina facility to be integrated with the hotel/hotel site.

CLIENT CONSIDERATIONS:

CLIENT: Sterling Investments, Inc. of Canada

DEVELOPER: Jericho Group, Whitefish, Montana

CONSIDERATIONS:

- o A 300-room convention hotel to occupy the site of the now demolished "Viking Lakeshore Inn," as well as additional adjacent land to the north, recently purchased by Sterling Investments, Inc.
- o Convention facilities for 500-600 persons, as well as dining and recreational facilities.
- o Maintain the character and fabric of the Whitefish area.
- o Anticipation of management by Hilton Hotels, Inc.
- o Make use of potential recreational activities inherent in the site, the region, and those typically seen in resort hotels.
- o First rate, quality construction and image, second to none in the region.
- o Preferred precedents: Grouse Mountain Lodge, Whitefish, MT; Kandahar Lodge, Big Mountain, Whitefish, MT.
- o Budget \$20,000,000 (\$60-70,000 per unit), includes site development as well as all hotel facilities.
- o Use additional land across Wisconsin Avenue (also owned by Sterling Investments, Inc.), if needed.

REGIONAL IDENTIFICATION:

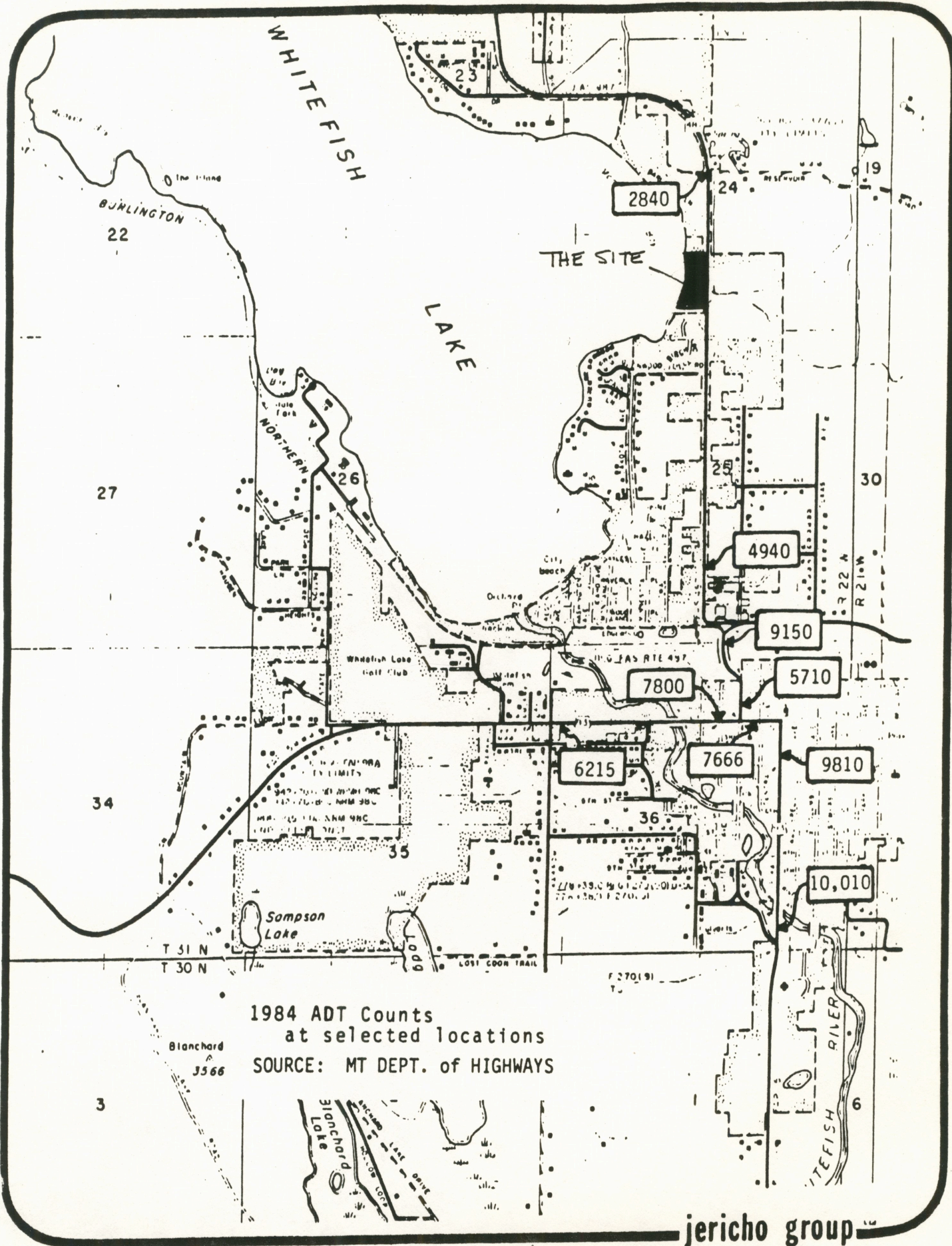
- O TELESCOPIC MAP SERIES
- O REGIONAL HISTORY AND AMENITIES

TELESCOPIC MAP SERIES



AREA LOCATION MAP





2640 49

N 89° 45' 56" E 2635 62'

2635 62'

DRIVE

LOT 1

Lot 3

THE SITE

LOT 4

ADDITIONAL
PROPERTIES
OWNED BY STEELING INV.

WILD WOOD

LOT 5

LOT 3

LOT 4

LOT 1

LOT 2

Lot 1

Lot 2

Lot 3

Lot 4

NORTHWOODS

NO 1

RESERVOIR ROAD

WHITEFISH

TOWNSITE

COMPANY'S

5 ACRE

TRACTS

ACRE TRACTS

WHITEFISH PLACE

TALLMAN

Lot 1

WATER PLACE

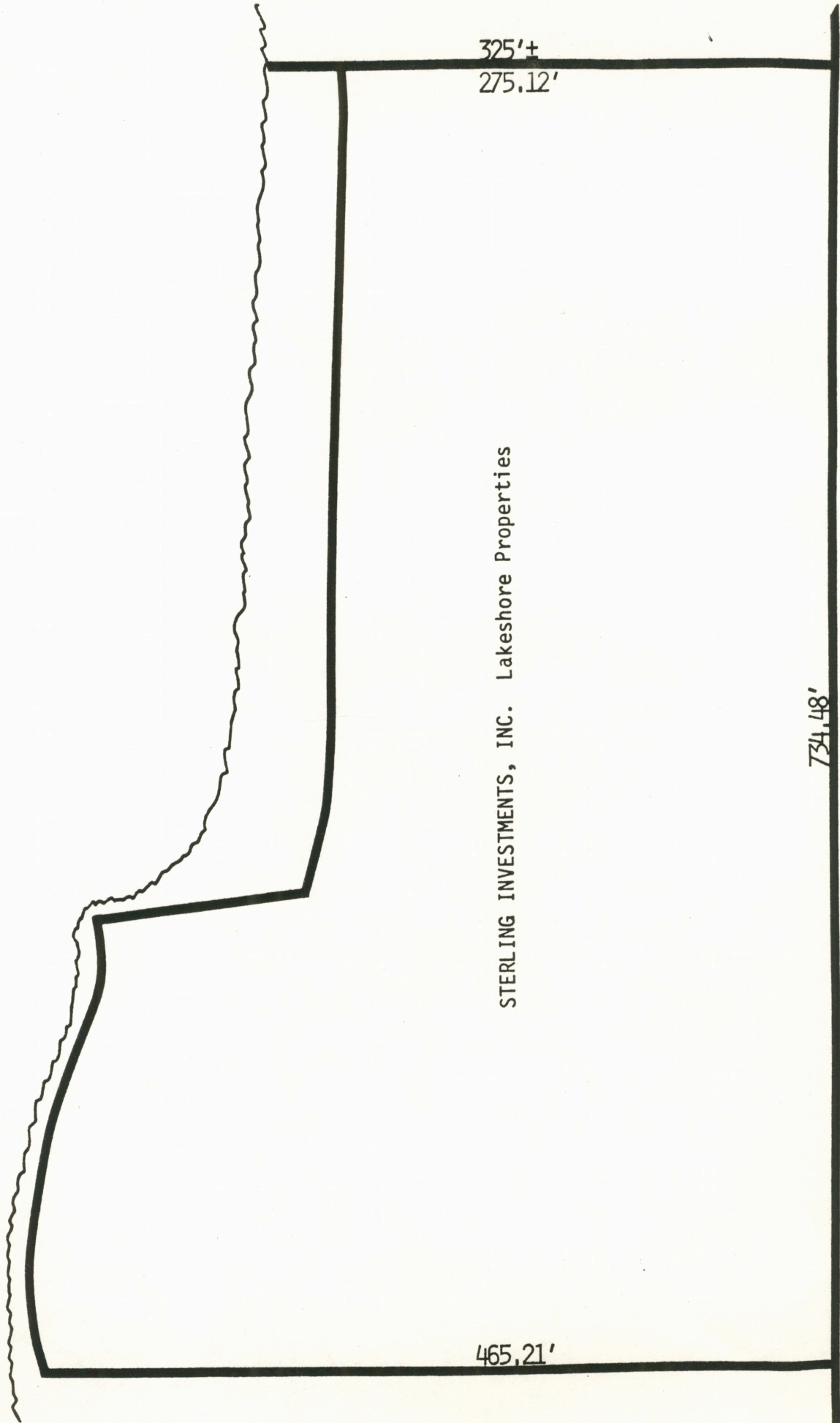
PLACE

PLACE

PLACE

PLACE

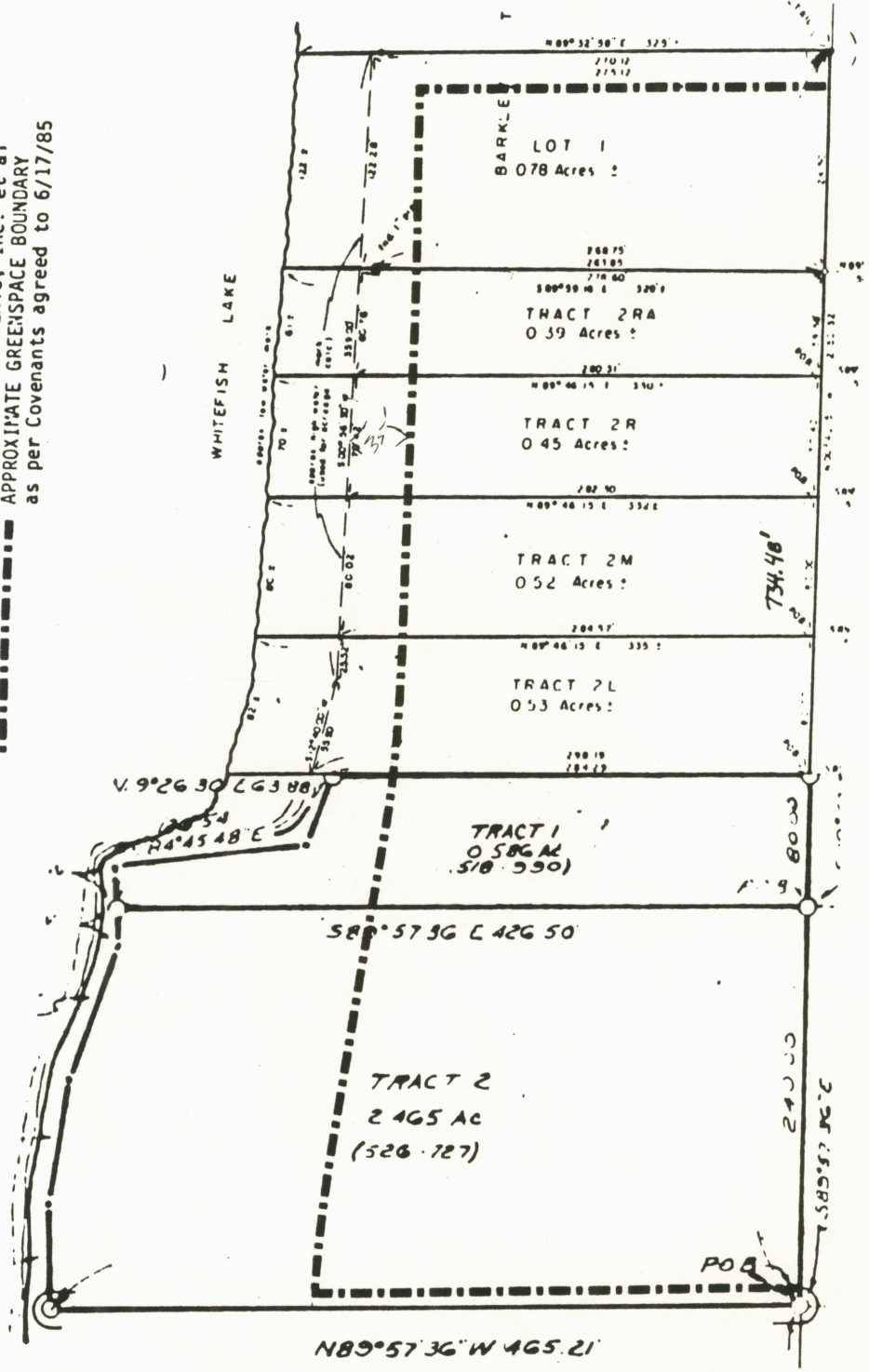
WHITEFISH LAKE



STERLING INVESTMENTS, INC. Lakeshore Properties

WISCONSIN AVENUE

STERLING INVESTMENTS, Inc. et al
 APPROXIMATE GREENSPACE BOUNDARY
 as per Covenants agreed to 6/17/85



REGIONAL HISTORY AND AMENITIES:

The city of Whitefish, Montana, located in the northern part of the Flathead Valley, was developed as a Great Northern Railroad division point in the early 1900's. For many decades, the railroad and timber industries were the engines driving the economic well-being of the community. Resorts, in the form of cabin camps, were dotted along the shores of Whitefish Lake, an asset of incomparable beauty. A few permanent year-round homes were located along the shore of Whitefish Lake until the 1960's.

Beginning in the early sixties, Whitefish Lake was rediscovered -- homes sprang up in many areas along the lake; most of them were still vacation or second homes, but they transcended the two-room, slab-sided cabins of yesteryear. During this time, the cabin camp resorts began to fade into neglect and disuse, in keeping with the transition to the era of motels. It was during this period also that the Viking Lodge was constructed on the shores of Whitefish Lake. At the time, it was the most modern facility in the region. By the late 60's, it was virtually alone in offering quality accommodations on Whitefish Lake, and all but three of the cabin camps were no longer in business. The decade of the 70's saw the demise of these remaining cabin camps, as they were (or are being) developed as resort condominiums or residential condominium projects.

During the late 70's, and continuing to the present, the type of dwellings being located along Whitefish Lake transisted again -- from second homes or vacation homes, to primary dwellings, many in the \$400,000 to \$500,000 class. Frontage costs on the lake rose to become the most expensive in the entire state of Montana.

Throughout the 70's, tourism in particular became the growth industry of the Whitefish, Flathead areas. Several factors can account for economic growth in these two areas. The Big Mountain ski area, operated by Winter Sports, Inc., is located eight miles from the center of Whitefish, and is an ever-popular winter ski destination. The Whitefish Lake golf course expanded first to 18 holes, then to 27, and is now considered by many to be the finest golf course in the state of Montana. The ease of transportation to Whitefish, via Highways 2 and 93, via Amtrak, or via scheduled airlines arriving and departing daily to Glacier International Airport lends itself to tapping an ever-growing tourism market. National vacation trends seem to have brought hundreds and thousands of tourists to the area. The importance of tourism as a growth industry has helped to offset the traditional local economic mainstays, and the potential of the tourist market in the Whitefish area has barely been scratched, let alone maximized.

Whitefish is already a major year-round resort location, with golf, water sports, fishing, hunting, hiking, rafting, and trail riding in the summer, and snowmobiling, cross-country skiing and downhill alpine skiing in the winter.

The overall attractiveness of Whitefish as a resort destination is enhanced by its proximity to other nearby attractions, such as the following:

- o Glacier National Park
- o The National Bison Range
- o The Bob Marshall Wilderness Area
- o The Great Bear Wilderness Area
- o The Mission Mountains Wilderness Area
- o Designated wild and scenic rivers
- o Vast state and federal forests

In addition, the proximity to Canada, and particularly to the Alberta market, promotes the future that the Whitefish area can anticipate in regard to economic development. Sixty percent or more of the tourist business can be attributed to the Canadian market, as well as a great impact on retail businesses. With every passing year, there is an ever-growing recognition of the Whitefish and Flathead region as a true tourist, resort destination... and, as the facilities to serve this growing trend are made available, the number of visitors will continue to spiral upward.

The natural scenery and recreational diversity of the Whitefish locale attract well over two million visitors each

year to the general area. An ever-growing positive business climate in the Whitefish area welcomes the addition of more and better facilities to serve both the local population and the visitor to the area.*

(*SOURCE: A report prepared by Jerry Hanson, Property Consultant, Whitefish, Montana, 1983.)

USER IDENTIFICATION

USER TYPOLOGY:

- (1) General Tourists
 - o families
 - o tour groups
 - o couples
 - o singles
- (2) Skiers
 - o tours
 - o families
 - o singles
 - o couples
 - o small groups
- (3) Business/Convention
 - o singles
 - o couples
 - o families
- (4) General Public
 - o local clientele
 - o day users
 - o lake users
 - o families
 - o singles
 - o couples
 - o small groups
- (5) Specialty
 - o weddings
 - o anniversary parties
 - o various banquets

IMPLICATIONS:

- o Provide wide range of on-site recreational facilities:
 - pool/jacuzzi/sauna
 - games room
 - cocktail lounge with stage
 - beach and other outdoor recreation spaces
- o Provide parking for tour buses
- o Provide driver's lounge
- o Daycare facilities
- o Commercial/retail areas -- ski shop, hair salon, etc.
- o Wide range of room occupancies and arrangements
- o Ski storage
- o Convention facility
- o Food and beverage service
- o Marina for day parking
- o Banquet facilities or private dining areas (various sizes)

PROJECT FEASIBILITY
AND
COST ANALYSES

PROJECT FEASIBILITY:

All indicators available point toward the potential for a major resort development in the Whitefish community area to be extremely successful. There appears, also, to be an absolute need for additional resort hotel/convention facilities in order to keep pace with the growing demands.

Jericho Group Ltd. has access to some \$250,000-\$300,000 in feasibility studies in the Whitefish area by such firms as Laventhol-Horwath, Pannel-Kerr-Forester, and others. All indicate the need for additional quality accommodations. Naturally, some of the earlier studies address a "virgin" market, having been done prior to the construction and opening of Grouse Mountain Lodge in 1984. This facility added 146 quality rooms to the overnight market in Whitefish. However, studies done since that time reflect a continuing need to meet existing demands.

Having reviewed these studies, each in the light of overall intimate knowledge of the community and regional area, it has been found that most recommendations have been rather conservative and limited in their basis. While each does justify the project for which it was done, each seems to be targeted only at existing demands, and not at aggressively generated demands. Jericho Group is confident that hard work and an aggressive marketing expertise will result in the

additional desired tourists needed to justify the Viking Convention Hotel project.

In addition, none of the several hotel studies reviewed appear to address the special and unique aspects of the regional area, i.e., two key factors that cannot be ignored in any feasibility assessment for a major resort hotel in the Whitefish area: Glacier National Park and the Big Mountain ski area.

Glacier National Park is the nation's eleventh largest national park, and while 1984 and 1985 visitor counts have leveled off, a visitor count of four million visitors per year by the end of the century has been projected. In addition, there will be no new overnight accommodations provided within the boundaries of the park itself during this time.

Where Glacier Park is projected to double its visitor county the year 2000, the Big Mountain ski area is anticipating doubling its skier visit per year by no later than 1992, due to an aggressive expansion program. The ski area has seen its attendance (skier days) double in the last eight years, with a compound growth of 9 percent annually. The limiting factor appears to be a lack of overnight accommodations as much as anything else. Currently, the Big Mountain ski area enjoys more skier visits per year than any other ski resort in Montana, including Big Sky, south of Bozeman. In

fact, Big Mountain logs approximately 40 percent more skier days than does Big Sky each year.

The Master Development Plan of the Big Mountain ski area will provide the facilities allowing for an increase in skier visits from an approximate 2000 per day currently to 4000 per day by 1992. By the end of the decade of the 90's, as many as 10,000 per day may be anticipated.

There is a current demand for 2450 beds per night during the ski season, as has been determined by the operators of the ski area. This demand is projected to rise to 5425 by 1992. There currently exist 1080 beds on the mountain, 1802₊ in Whitefish, not including timesharing facilities. Grouse Mountain Lodge should be added to the latter figure, bringing the current total to 2100₊. The growth plan of Big Mountain will add approximately 1620 beds by 1992 to those now existing, bringing the total to perhaps as many as 5872₊ in the Whitefish area. This number does not include any of those that would be provided by the Viking Lodge redevelopment project. However, it should be noted that apparently only 80 percent of the beds on Big Mountain and 47 percent of the beds in Whitefish are attributable to skiers during the ski season.

By adding the impacts of the visits to Glacier National Park and those of the Big Mountain ski area, and taking into consideration the potential for national and international

marketing of a destination resort hotel, it readily becomes evident that a facility such as the redevelopment of the Viking Lakeshore Inn becomes an extremely viable prospect.

The owners of the Viking Lakeshore Inn have recognized the absolute need for two crucial factors not related to the location: (1) Success of the operation will be eased if the hotel is operated by a major hotel chain, taking advantage of their reputation and name recognition, and (2) that the management of the facility be under the control of extremely competent professional leadership, an attribute most likely to be found, again, in the ranks of a major hotel chain.*

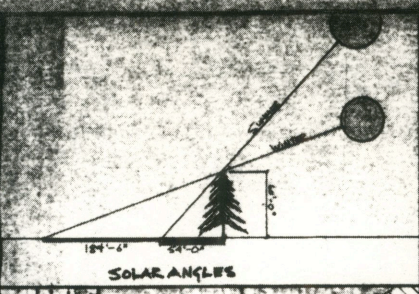
(*SOURCE: A report prepared by Jerry Hanson, Property Consultant, Whitefish, Montana, 1984.)

COST ANALYSES:

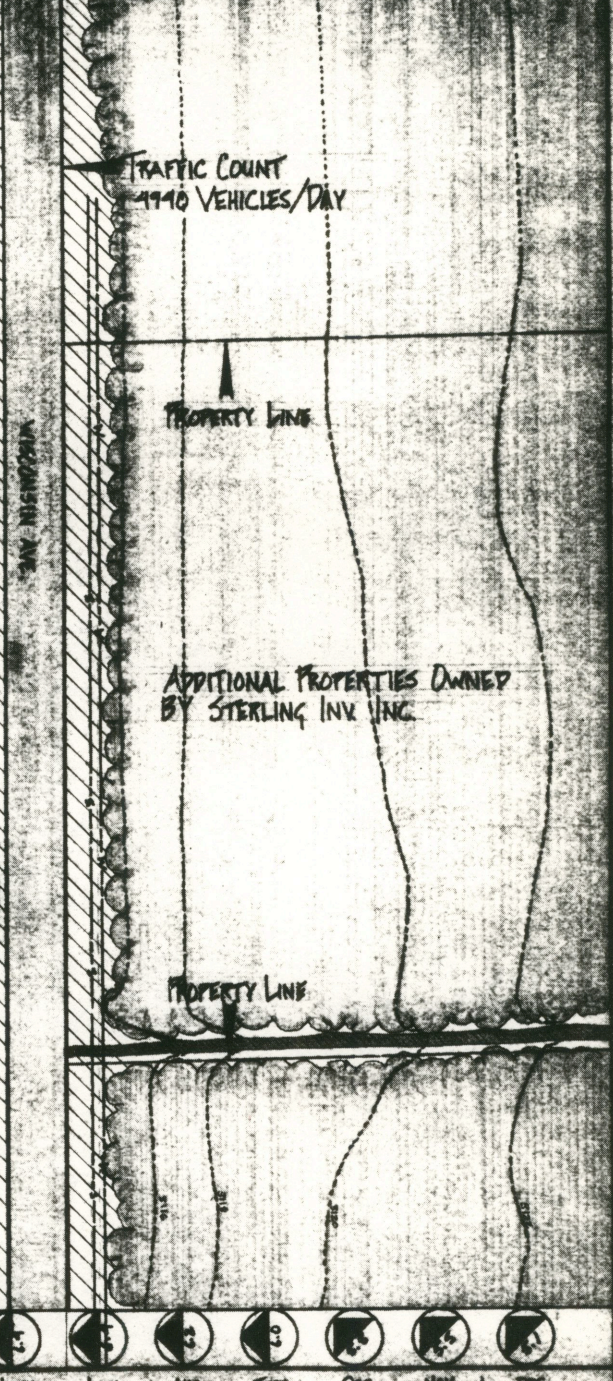
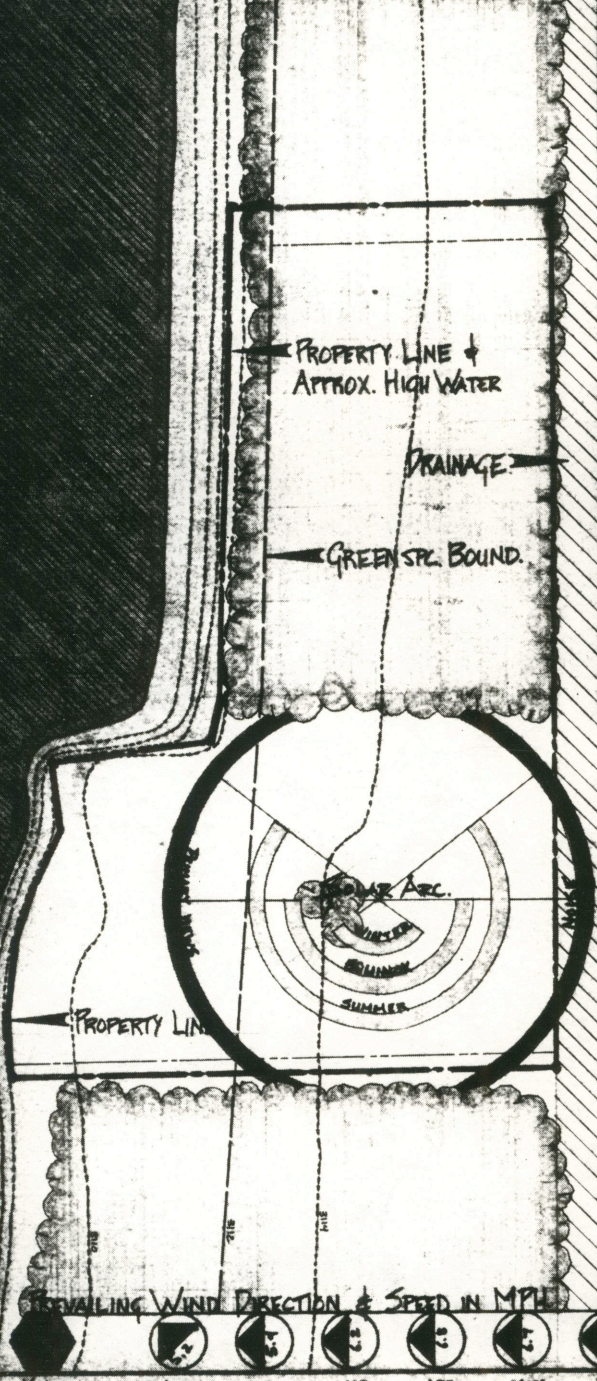
A. Building Costs (213,515 sq.ft. @ an average of \$55/sq.ft.....	\$11,743,325
B. Fixed Equipment (15% of A).....	1,761,498
C. Site Development (25% of A).....	<u>2,935,831</u>
D. Total Construction.....	\$16,440,654
E. Site Acquisition/Demolition.....	---
F. Movable Equipment (10% of A).....	\$ 1,174,332
G. Professional Fees (7% of D).....	1,150,845
H. Contingencies (5% of D).....	822,032
I. Administrative Costs (2% of D).....	<u>328,813</u>
TOTAL BUDGET REQUIRED.....	\$19,916,676

THE SITE:

- O SITE ANALYSES
- O CLIMATE DATA



DECEMBER	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
1815	1842	1856	1901	1904	1909	1915	1920	1925	1930	1935	1940	1945
1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2



YEAR JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC.



SITE ANALYSIS



CLIMATE DATA:

Temperatures

Month	Averages ($^{\circ}\text{F}$)		Extremes ($^{\circ}\text{F}$)	
	Daily Max.	Daily Min.	Highest	Lowest
Jan	15.2	- 2.0	48	-24
Feb	28.4	11.3	48	-13
Mar	39.6	22.3	49	1
Apr	59.1	34.9	75	26
May	69.1	42.2	86	30
Jun	71.8	43.1	86	35
Jul	79.9	47.6	93	35
Aug	83.1	47.4	94	33
Sep	71.0	39.1	87	25
Oct	50.8	29.3	59	19
Nov	45.4	31.0	60	20
Dec	31.5	16.8	50	- 1

Degree Days

Month	$^{\circ}\text{Days}$	Month	$^{\circ}\text{Days}$	Month	$^{\circ}\text{Days}$
Jan	1813	May	294	Sep	300
Feb	1262	Jun	229	Oct	775
Mar	1056	Jul	95	Nov	804
Apr	541	Aug	68	Dec	1264

CODE ANALYSES

CODE ANALYSES

Group R Occupancies; Division-I Applicable

CONSTRUCTION, HEIGHT & ALLOWABLE AREA:

General:

- o Types of construction -- Tables 5-C and 5-D in UBC
- o Area, Height Limitations -- Sections 505, 506, 507

Special Provisions:

- o Minimum/hour
- o Fire-resistive construction throughout

Exit Facilities:

- o Each room below 4th floor shall have at least 1 operable window or exterior door approved for emergency exit.
- o Minimum of 2 exits other than elevators for occupancy over 10. Exits must be enclosed.

Room Dimensions:

- o Minimum ceiling height: 7'6"
- o Minimum floor area: 150 sq.ft.

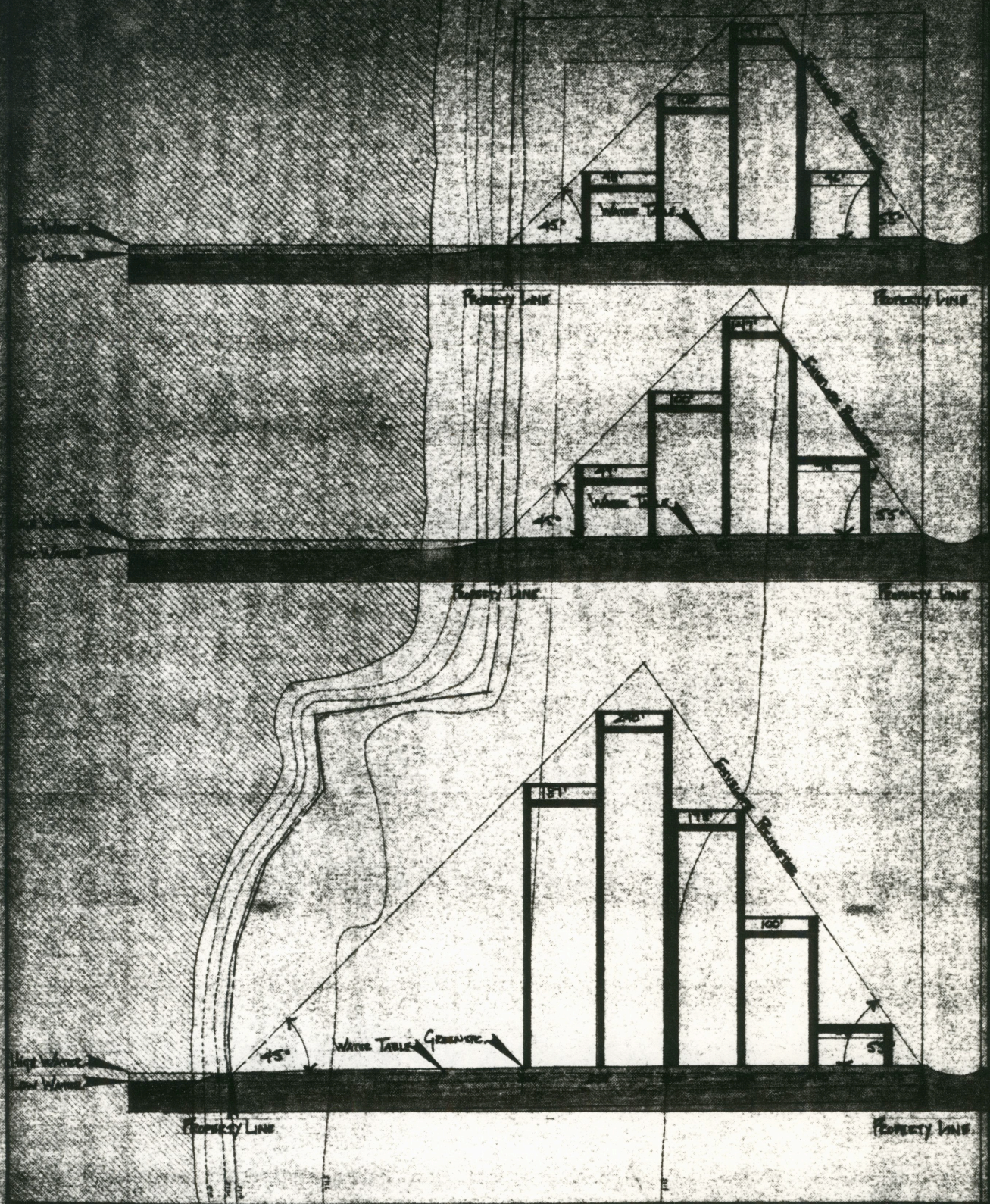
Fire Warning & Sprinkler Systems:

- o Must be provided throughout

No. of Guest Rooms for Physically Handicapped:

- o 1 per 100 persons, plus 1 for each additional 100 units or fraction thereof

ZONING IMPLICATIONS



SITE SECTIONS

SCALE: 1/8"=1'-0"



CONVENTION HOTEL WHITEFISH MONTANA

PROBLEM SEEKING:
GOALS AND CONCEPTS

PROBLEM SEEKING: VIKING CONVENTION HOTEL

GOALS AND CONCEPTS: As pertain to function...

- G: To create quality hotel accommodations, entertainment, recreation and convention facilities on Whitefish Lake.
- C: o Maintain or exceed standards set forth by Hilton hotels for room design, access corridors, general planning, etc.
- G: To create a facility that, through its amenities, entices maximum occupancy rate for a 300-room convention hotel as well as banquet/convention room for a maximum of 600 persons.
- C: o Provide a marina for summer water sports.
 - o Provide business atmosphere for convention room users.
 - o Use aggressive national and international marketing approach.
 - o Make use of potential on-site and regional recreation facilities.
- G: Create efficient guest flow from entry/check-in to various facilities and services.
- C: o Use lobby space as a central feature adjacent to areas of public dining and beverage services, guest room access, indoor and outdoor recreational facilities.
 - o Unobstructed, clear circulation patterns throughout public areas of hotel and site.

PROBLEM SEEKING: VIKING CONVENTION HOTEL

GOALS AND CONCEPTS: As they pertain to function...

- G: To create quality hotel accommodations, entertainment, recreation and convention facilities on Whitefish Lake.
- C: o Maintain or exceed standards set forth by Hilton hotels for room design, access corridors, general planning, etc.

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- C: o Provide a marina for summer water sports.
 - o Provide business atmosphere for convention room users.
 - o Use aggressive national and international marketing approach.
 - o Make use of potential on-site and regional recreation facilities.

- G: Create efficient guest flow from entry/check-in to various facilities and services.
- C: o Use lobby space as a central feature adjacent to areas of public dining and beverage services, guest room access, indoor and outdoor recreational facilities.
 - o Unobstructed, clear circulation patterns throughout public areas of hotel and site.

- G: Create safe transition of guests from vehicles to building and on-site amenities.
- C: o Make areas of services and personnel inaccessible to guests and general public through use of separation by floor, separate circulation, walls and partitions.
- G: Create two separate and distinct atmospheric qualities: one for guest rooms, the other for public areas such as dining room, lobby, convention room, etc.
- C: o Separation of guest rooms from areas of public congregation.
- G: Create functional efficiency of services in order to provide dependable, quality service to guests without interference of day-to-day duties of service personnel and other hotel staff.
- C: o Provide access to all guest areas by service personnel through the use of service corridors, elevators, etc.

GOALS AND CONCEPTS: As they pertain to form...

- G: To create a natural, relaxing setting within which to recreate, relax, attend to business, etc.
- C: Extensive use of lawns, trees and other open space.
 - o Maintain greenspace boundary as per zoning regulations, as well as all setback regulations and height, distance formulae for this district.
 - o Enhance beachfront area through use of locally imported sand, retaining walls, etc.
- G: To create a facility that blends with the fabric of Whitefish, maintaining contextural aesthetics so that the hotel will suit its environment and not become obtrusive.
 - o Total height of complex to be kept at a minimum where-ever possible.
 - o Use of regional building materials.
 - o Use of heavy, pitched rooflines.

GOALS AND CONCEPTS: As they pertain to economy...

G: To create a hotel/convention facility that is exceptional in quality for its locale and region, yet remain within budget constraints as set forth by owner.

C: o Extent of funds available (\$20 million) is adequate for complex of this nature.

G: To create a catalyst for further commercial and recreational facilities in the area.

C: o Incorporate recreational and commercial features and facilities into hotel.

G: Maintain quality without sacrificing the minimizing of construction and maintenance costs.

C: o Use of regional materials, construction methods and local labor force.

G: Create efficiency of systems to lower costs of heating and cooling.

C: o Orient building to take advantage of natural characteristics of site in order to minimize heat loss and heat gain, depending on season.

o Single complex, tightly grouped spaces, use of double entry vestibules, etc.

GOALS AND CONCEPTS: As they pertain to time...

- G: To create a facility that can serve as long-term investment to owner.
- C:
 - o Use quality, long-life building materials to extend building life.
 - o Use of style that does not readily become outdated.
- G: To create a facility that may be expanded in the areas of guest room occupancy and commercial change.
- C:
 - o Leave enough room on site for possible extension of guest room wings.
 - o Provide flexible partitions, wall systems throughout commercial areas.
- G: Completion of project in single phase.
- C:
 - o Funds are adequate in order to complete hotel, amenities, outdoor areas and marina in their entirety.

FACTS, NEEDS AND
GENERAL CONSIDERATIONS

"FRONT OF THE HOUSE" FACILITIES

"Front of the House" includes all those spaces the guests see: lobby, dining areas, restrooms, cocktail lounge, passenger elevators, corridors, hotel rooms, etc.

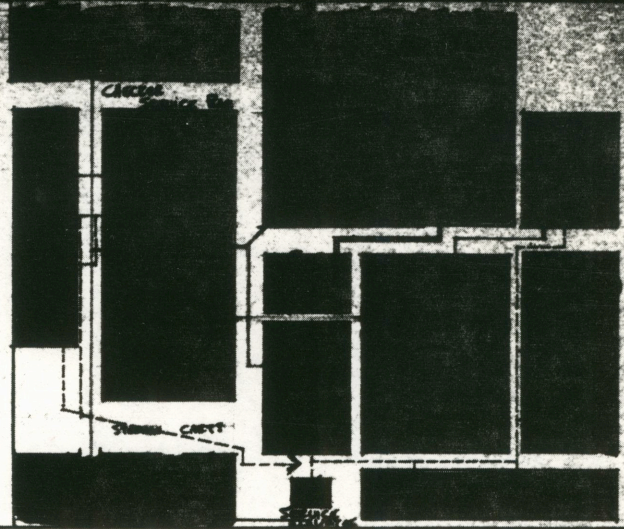
The convenience and comfort of guests is of utmost importance.

ADMINISTRATIVE

- FRONT OFFICE
- REGISTRATION
- GENERAL OFFICE SPACE

SERVICE FLOW

- PASSENGER
- COOKED FOOD
- FOOD FLOW
- GARBAGE
- ROOM SERVICE



SERVICE

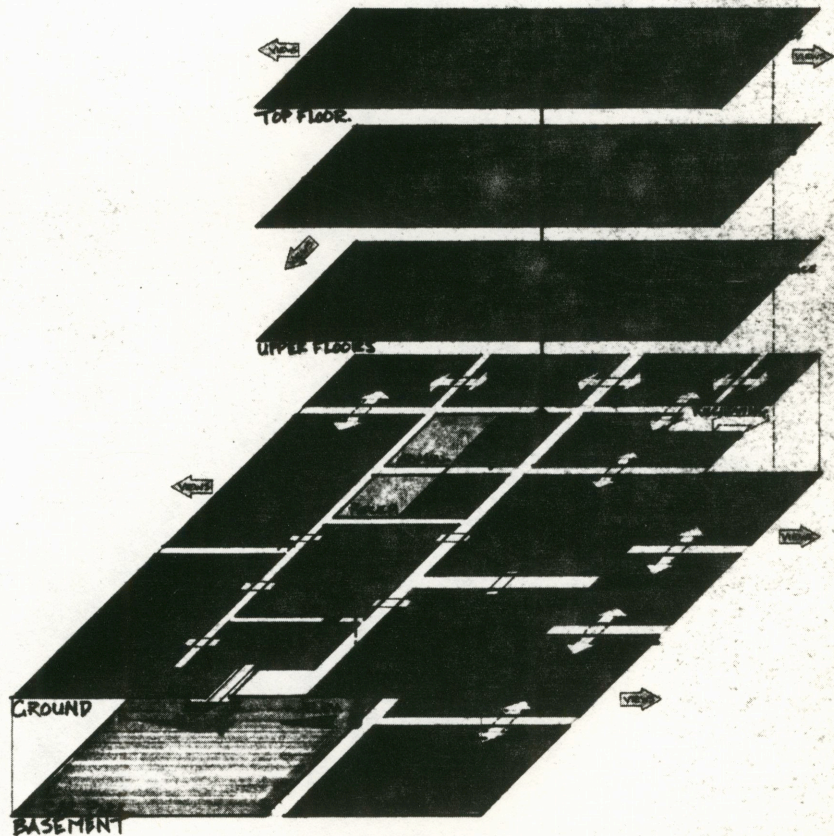
- MAIN KITCHEN
- MAINTENANCE
- MECHANICAL
- RECEIVING / SERVICE ENTRY
- SERVICE ELEVATOR
- OFFICES - STAFF
- CONVENTION PANTRY
- LAUNDRY
- HOUSEKEEPING
- FOOD & BEV STORAGE
- GENERAL STORAGE

GUESTS

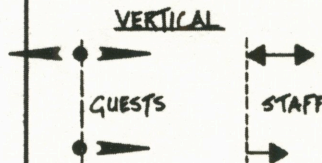
- GUEST ROOMS
- RECREATION AREA / POOL
- DINING RM. COFFEE SHOP
- CONVENTION FACILITIES
- COCKTAIL LOUNGE

GENERAL PUBLIC

- RETAIL
- DINING RM. COFFEE SHOP
- LOBBY
- CONVENTION FACILITIES
- COCKTAIL LOUNGE
- PASSENGER ELEVATOR



CIRCULATION



HORIZONTAL



IDEAL ADJACENCY & FLOW

LOBBY & CONVENTION FOYER

- SPATIAL REQUIREMENT: 3000 sq.ft. Lobby
1500 sq.ft. Convention Foyer
- QUALITY: Grand
- CHARACTER: Opulant, machined rusticism, relaxing
- CIRCULATION:
- o Hotel guests
 - o Conventioneers
 - o Day and evening guests
 - o General public
- ADJACENCIES:
- o Main entrance
 - o Front office/administration
 - o Commercial/retail
 - o Lounge
 - o Convention foyer
 - o Guest registration/front desk
 - o Restrooms
 - o Dining room
 - o Coffee shop
 - o Cocktail lounge
 - o Elevator banks
- LIGHT, AIR, VIEWS:
- o Must accommodate all three
 - o Controlled natural lighting
- CONSIDERATIONS:
- o Open space to accommodate convention room users
 - o Lobby will set mood for entire hotel (first and last impressions)
 - o Convention foyer to serve as alcove to one side of lobby
 - o Convention foyer should have fixed bar & beverage facility
 - o Hotel circulation and adjacencies made explicit to guests
 - o Seating & congregation areas
 - o Fireplace
 - o Cathedral ceiling
- MATERIALS:
- o Lush carpeting
 - o Extensive use of stained wood
 - o Exposed structure
 - o Frosted glass designs

DINING ROOM

SPATIAL REQUIREMENT: 4000 sq.ft.

QUALITY: Grand

CHARACTER: Intimate, light & airy, machined rusticism, candlelight

CIRCULATION:

- o Guests
- o General Public
- o Restaurant service staff

ADJACENCIES:

- o Lobby
- o Cocktail lounge
- o Main kitchen

LIGHT, AIR, VIEWS:

- o Use of well-controlled natural light
- o Primary consideration for views

CONSIDERATIONS:

- o Serves lunch and dinner only
- o Variety of table arrangements, eating areas
- o No booths
- o All areas accessible to exterior views
- o Maitre d' station with reception
- o Hat & coat check
- o Small waiting area
- o Cathedral ceiling

MATERIALS:

- o Extensive use of stained wood
- o Lush carpeting
- o Exposed structure

COFFEE SHOP

SPATIAL REQUIREMENT: 2000 sq.ft.

QUALITY: Excellent

CHARACTER: Light, airy, more subdued in decor and atmosphere than dining room

CIRCULATION:

- o Guests
- o General public
- o Administrative staff

ADJACENCIES:

- o Main lobby
- o Dining room
- o Lounge
- o Main kitchen
- o Indoor pool/games area
- o Commercial/retail

LIGHT, AIR, VIEWS:

- o Primary consideration

CONSIDERATIONS:

- o Cashier, reception
- o Waiting area

COCKTAIL LOUNGE

SPATIAL REQUIREMENT: 1800 sq.ft.

QUALITY: Grand, carried over from dining room

CHARACTER: Same as dining room

CIRCULATION:

- o Guests
- o General public
- o Lounge staff

ADJACENCIES:

- o Lobby
- o Dining room
- o Convention room
- o Main entry
- o Elevators
- o Front desk
- o Main kitchen

LIGHT, AIR, VIEWS:

- o Primary importance
- o Well-controlled natural light

CONSIDERATIONS:

- o Light food service
- o Provides beverages & liquors to dining room, coffee shop, private dining rooms, room service, convention facilities
- o Small stage for live entertainment
- o Area for dance floor
- o Fireplace
- o Various assortment of seating configurations

MATERIALS: Same as dining room

CONVENTION ROOM

SPATIAL REQUIREMENT: 6000 sq.ft.

QUALITY: Grand

CHARACTER: Same as lobby, spacious

CIRCULATION:

- o Conventioneers
- o Convention service personnel
- o Guests

ADJACENCIES:

- o Convention foyer
- o Main kitchen
- o Lobby
- o Cocktail lounge

LIGHT, AIR, VIEWS:

- o Well-controlled natural light
- o Direct access to exterior
- o Select views

CONSIDERATIONS:

- o Direct access to exterior via French doors, balconies
- o Room divisible into smaller banquet rooms
- o Stage area & podium
- o Accoustically acceptable for presentations, live entertainment
- o Adequate fire ratings & exits
- o Buffered from guest rooms
- o Cathedral ceiling

MATERIALS: Same as lobby & dining room

PRIVATE DINING ROOMS

SPATIAL REQUIREMENT: 1800 sq.ft. total

QUALITY: Grand -- same as dining room

CHARACTER: Same as dining room

CIRCULATION:

- o Private diners
- o Dining room service personnel

ADJACENCIES:

- o Main dining room
- o Main kitchen
- o Convention pantry
- o Lobby

LIGHT, AIR, VIEWS:

- o Select views
- o Well-controlled natural light

CONSIDERATIONS:

- o Maitre d' station -- portable
- o Single room dividing into 2 or 3 smaller rooms
- o To accommodate 20-100 people
- o Access to exterior spaces
- o Fireplace

MATERIALS: Same as dining room

FRONT OFFICE/ADMINISTRATION

<u>SPATIAL REQUIREMENTS:</u>	Manager's Office.....	150 sq.ft.
	Assistant Manager.....	100 sq.ft.
	Secretaries (x 2).....	150 sq.ft.
	Accounting.....	150 sq.ft.
	Conference.....	<u>200 sq.ft.</u>
	Total.....	750 sq.ft.

QUALITY: Excellent, economical

CHARACTER: Professional, regimented, efficient,
clean, technical

CIRCULATION: Administrative personnel

ADJACENCIES:

- o Guest registration
- o Lobby

LIGHT, AIR, VIEWS:

- o Consideration made to all 3, but
not a necessity

CONSIDERATIONS:

- o Efficient, open floor plan
- o Computer access
- o Storage closets
- o Filing/workspace
- o Coffee bar

MATERIALS:

- o Carpet
- o Wood (stained), machined

FRONT OFFICE/GUEST REGISTRATION

<u>SPATIAL REQUIREMENTS:</u>	Registration Desk.....	220 sq.ft.
	Cashier.....	50 sq.ft.
	Safe deposit boxes.....	100 sq.ft.
	Mail & Keys.....	<u>100 sq.ft.</u>
	Total.....	470 sq.ft.

QUALITY: Continuous from lobby

CHARACTER: Continuous from lobby

CIRCULATION:

- o Administrative personnel
- o Cashier
- o Check-in staff

ADJACENCIES:

- o Front lobby/main entrance
- o Commercial/retail
- o Elevator banks

LIGHT, AIR, VIEWS:

- o Not necessary, as front desk is contiguous with lobby

CONSIDERATIONS:

- o Privacy for viewing safe deposit boxes
- o Secure
- o Efficient circulation
- o Large front desk (22' in length)

COMMERCIAL/RETAIL

<u>SPATIAL REQUIREMENTS:</u>	Typical: Hair Salon Gift Shop Travel Agency Additional 3 spaces to be allotted Total: 2500 sq.ft.
<u>QUALITY:</u>	Excellent
<u>CHARACTER:</u>	Public access corridors, same sumptuous handling as lobby and front desk area
<u>CIRCULATION:</u>	- o Guests - o General public - o Commercial/retail operators & staff use rear entrance corridor
<u>ADJACENCIES:</u>	- o Lobby - o Public corridors - o Main entrance
<u>LIGHT, AIR, VIEWS:</u>	Not necessary
<u>CONSIDERATIONS:</u>	- o High retail profile - o Adjustable spatial allotment - o Total of 6 retail outlets - o Storage -- additional 1000 sq.ft.
<u>MATERIALS:</u>	- o Carpet - o Glass store front - o Stained wood veneers - o Exposed structure

INDOOR POOL & RECREATION AREA

SPATIAL REQUIREMENT: 2500 sq.ft.

QUALITY: Excellent

CHARACTER: Light, airy, machined rusticism

CIRCULATION:

- o Hotel guests
- o Lounge personnel
- o Coffee shop personnel

ADJACENCIES:

- o Guest room access
- o Coffee shop
- o Cocktail lounge
- o Pool mechanical

LIGHT, AIR, VIEWS:

- o Access to exterior recreation areas
- o Natural light from top & sides
- o Views a consideration

CONSIDERATIONS:

- o Pool (15' x 35') w/diving board, depth 3'0" → 11'0"
- o Games area
- o Lounge area w/fireplace
- o Access through French doors to balcony, exterior spaces
- o Contain odors through proper ventilation
- o Surrounded on 2 sides by glass, as well as top
- o Liquor/beverage & light food service
- o Change rooms
- o Bathing suit & towel storage (50 sq.ft.)
- o Pool equipment storage (100 sq.ft.)
- o Pool mechanical (100 sq.ft.)
- o Cathedral ceiling
- o Atrium effect
- o Sauna, hot tubs (x 2)

MATERIALS:

- o Rock flooring & pool trim
- o Water-resistant treated, stained wood
- o Exposed structure
- o Frosted, designed glass

ELEVATORS -- PASSENGER

- SPATIAL REQUIREMENT: 3 elevators min. @ 50
sq.ft. ea..... 150 sq.ft.
- QUALITY: Continuous from lobby to guest room
access corridors
- CHARACTER: Same as lobby
- CIRCULATION:
- o Hotel guests
 - o Porters
 - o Administration
- ADJACENCIES:
- o Main entrance
 - o Front desk/guest registration
 - o Lobby
 - o Convention facilities
 - o Cocktail lounge
- LIGHT, AIR, VIEWS: Unnecessary
- CONSIDERATIONS:
- o Able to withstand heavy traffic &
movement of luggage, skis, etc.
 - o Easily visible from front desk &
main entry

COMMERCIAL RETAIL STORAGE
(W/ACCESS CORRIDOR)

SPATIAL REQUIREMENT: 1500 sq.ft. total

QUALITY: Austere, easily cleaned & maintained

CHARACTER: Storage facility

CIRCULATION:

- o Commercial/retail staff
- o Hotel security
- o Administrative personnel

ADJACENCIES:

- o Access corridor
- o Commercial/retail stores
- o Garbage room

LIGHT, AIR, VIEWS: Unnecessary

CONSIDERATIONS:

- o Each retail outlet should have its own storage area
- o Accessible only by those related to the ownership or operation of retail space
- o Rear entry through storage facility into retail outlet
- o Garbage pickup
- o Secure

WOMEN'S TOILETS W/RESTROOM

SPATIAL REQUIREMENT: Toilets..... 500 sq.ft.
Restroom..... 300 sq.ft.

QUALITY: Continuous from lobby

CHARACTER:

CIRCULATION:

- o Guests
- o General public
- o Maintenance staff

ADJACENCIES:

- o Lobby
- o Main entry
- o Dining room
- o Coffee shop
- o Cocktail lounge
- o Convention room

LIGHT, AIR, VIEWS: Unnecessary

CONSIDERATIONS:

- o May be one or many strategically located
- o Entrance should not be directly obvious
- o Cleaning equipment storage
- o Restroom should have lighted mirrors, vanities, lounge area, attendant area

MATERIALS:

- o Ceramic tile
- o Carpet
- o Extensive use of stained wood

MEN'S TOILETS

SPATIAL REQUIREMENT: Toilets -- 500 sq.ft.

QUALITY: Continuous from lobby

CHARACTER:

CIRCULATION:

- o Guests
- o General public
- o Maintenance staff

ADJACENCIES:

- o Lobby
- o Main entry
- o Dining room
- o Coffee shop
- o Cocktail lounge
- o Convention room

LIGHT, AIR, VIEWS: Unnecessary

CONSIDERATIONS: Same as women's

MATERIALS: Same as women's

GUEST ROOMS & CORRIDORS

NOTE: Because the VIKING CONVENTION HOTEL would become a part of the "Hilton" hotel chain, it is necessary to plan and design guest rooms and related areas according to Hilton's standardized room configurations, features, dimensions, and quality. Therefore, a copy of "Planning and Design Standards" prepared by the Hilton Hotels Corporation will accompany this program (see Appendix B). All requirements set forth by Hilton should be strictly adhered to in any design that anticipates management by, or franchise to, the Hilton Hotels Corporation.

NUMBER & TYPE OF ROOMS:

- o 300 Sleeping Rooms: 70% Double Doubles*..... 210 total
20% Kings..... 60 total
10% Pivots..... 30 total
- o Luxury Suites: Each flanked by one double double and one king.
- o Junior Suites: Each have double double sleeping accommodations.
- o 2 "Large" Meeting Rooms

(*Four double double sleeping rooms equipped with baths for handicapped access. Dimensions provided by Hilton -- see Appendix B.)

SPATIAL REQUIREMENTS (min.):

- o 210 Double Doubles 358 sq.ft. ea.
- o 60 Kings..... 358 sq.ft. ea.
- o 30 Pivots..... 358 sq.ft. ea.
- o 2 Luxury Suites..... 716 sq.ft. ea.
- o 2 Junior Suites..... 716 sq.ft. ea.
- o 2 Large Meetings Rooms..... 716 sq.ft. ea.

312 total "units" (26'6" x 13'6") required.

Total space required: 111,618 sq.ft.

GUEST ROOMS & CORRIDORS (cont'd.):

- QUALITY: Meet or better, minimum standards set forth by Hilton
- CHARACTER: Intimate, private
- CIRCULATION:
- o Guests
 - o Maids
 - o Room service
- ADJACENCIES:
- o Guest rooms should act as a separate entity, segregated away from public, administrative & services functions
 - o Room configurations, adjacencies, room-to-room entryways, as per Hilton standards and recommendations (see Appendix B)
- LIGHT, AIR, VIEWS: Primary access to best views & natural light
- CONSIDERATIONS:
- o Each room should have private balcony
 - o Corridors @ 6'0" width minimum
 - o Recessed entries for all rooms
 - o Avoid excessive distances from elevators & stairways
 - o Avoid placing rooms across from elevators
 - o Public seating area & telephone across from elevator banks
 - o Corridors 25% of guest room area
- MATERIALS:
- o Baths -- according to Hilton's specifications (Appendix B)
 - o Sleeping area -- lush carpeting
 - o Extensive use of natural wood trim & wainscoating
 - o Accoustical ceiling panels

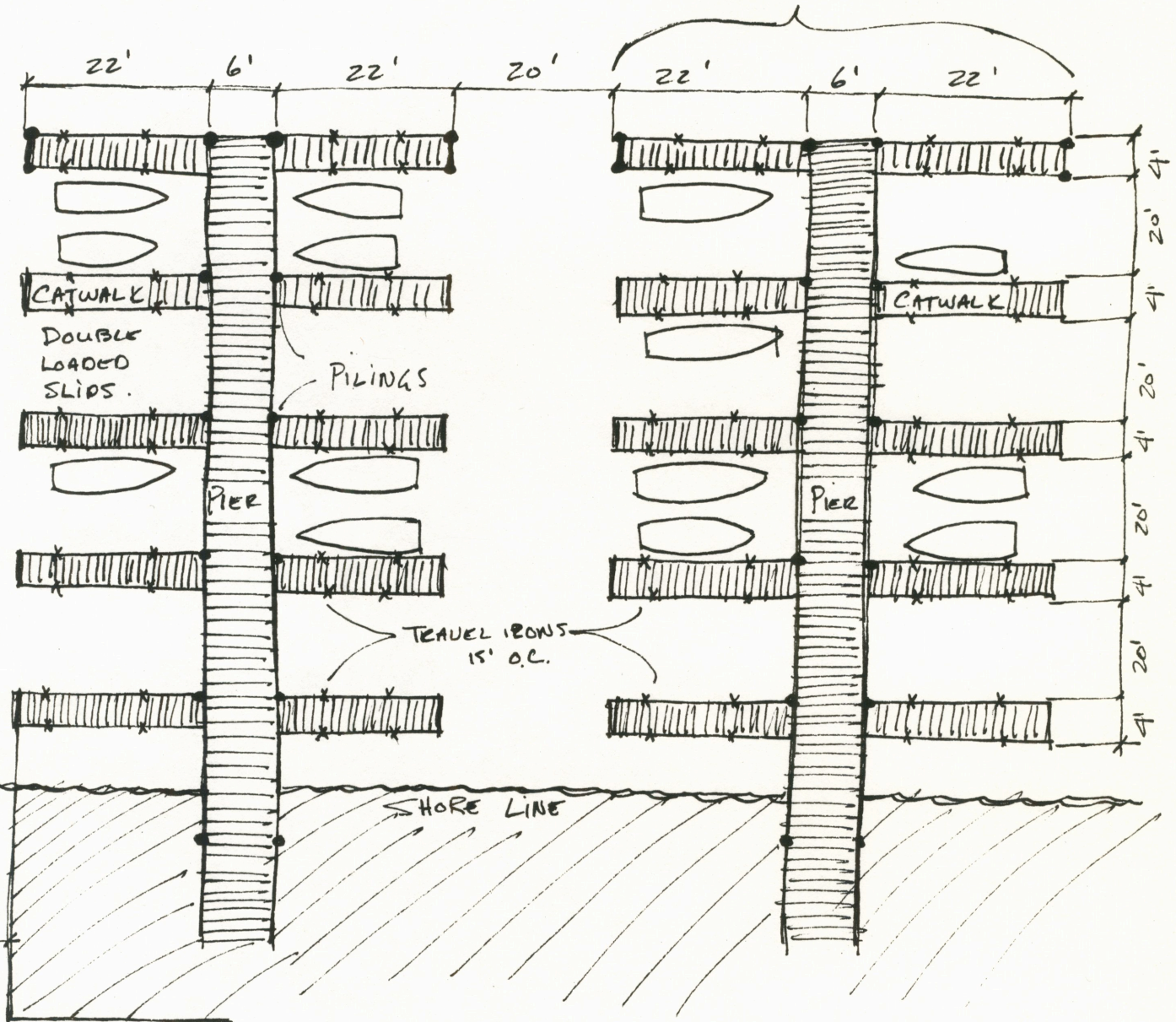
MARINA

<u>NUMBER OF BOATS:</u>	30-35
<u>LENGTH OF BOATS:</u>	Up to 22'0"
<u>WIDTH (BEAM) OF BOATS:</u>	Maximum 10'0"
<u>MINIMUM SOUND:</u>	- o Powerboats..... 4'0" - o Sailboats..... 6'0"
<u>SLIP DIMENSIONS & LAYOUT:</u>	See diagram
<u>BOAT LAUNCH:</u>	- o Concrete pad - o Slope 1:6 - o 24' width - o Adjacent to pier or catwalk
<u>EQUIPMENT STORAGE SHED:</u>	200 sq.ft.
<u>CONSIDERATIONS:</u>	- o Pier(s) and catwalks should be able to drain off water - o Pier(s) should be structurally fixed to lake bottom, yet adjustable 8'0" vertically - o Catwalks may be of floating type, attached by cables to lake bottom - o Marina & consequent boat traffic should be removed from swimming, waterskiing areas - o 2 MPH speed limit for boats approaching or inside marina - o End catwalks should be structurally fixed to lake bottom to serve as breakwater

MARINA

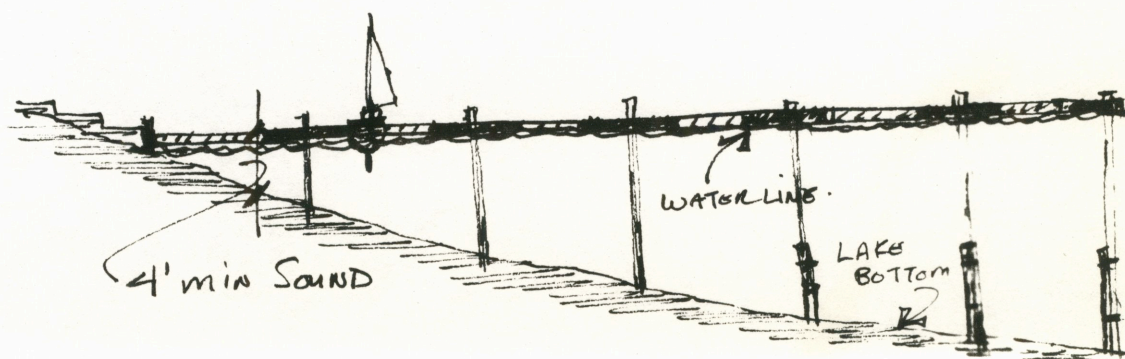
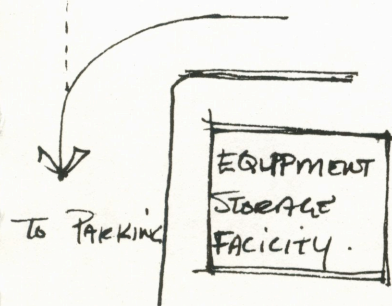
SLIP Dimensions & Layout.

BOATS OF EXCESSIVE LENGTH.



BOAT LAUNCH 24'

SHORE LINE



PARKING REQUIREMENTS

Guests: 250-300 spaces
Convention: 100 spaces
Gen. Public: 100 spaces
Staff: 60 spaces
Buses: 6'10"

Total: 510 spaces @ 350 sq.ft./space = 178,500 sq.ft.

CONSIDERATIONS:

- o Because there is not adequate space to accommodate both hotel and all parking requirements on-site, it may be necessary to use land on east side of Wisconsin Avenue for additional parking area.
- o Primary parking nearest hotel shall be for handicapped, guests and staff.
- o Secondary parking across Wisconsin Avenue shall be for convention users, general public, if needed.
- o Use of drop-off at main entrance.
- o Anticipate use of valet parking.
- o Provide traffic control or overhead walkway as a means to traverse Wisconsin Avenue to hotel, if necessary.
- o Access to loading dock and central receiving by trucks exceeding 60' in length.
- o Provide turn-around for car/boat trailer units using boat launch.
- o Keep parking areas illuminated during nighttime hours.
- o Use of landscape elements.
- o Space for 6-10 tour buses with electrical outlets.

"BACK OF THE HOUSE" FACILITIES

"Back of the House" facilities are the most crucial part of planning any hotel development, particularly when a wide range of services is intended to be provided a guest. It is these areas that the guests rarely see, yet they must be available to accommodate the guests' every need.

Two factors that are most important to facilitate the smooth operation and cost-effectiveness of "back of the house" facilities are efficiency and control. Designing these facilities with these factors inherent in the plan will prevent unnecessary hiring of supervisory personnel and the later addition of security measures to control the flow of valuable commodities such as foodstuffs, liquor and beverages, hotel furniture, etc.

SERVICE ENTRY

SPATIAL REQUIREMENTS: 100 sq.ft.

QUALITY: Austere, easily cleaned and maintained

CHARACTER:

CIRCULATION:

- o Entry point for hotel staff & service personnel
- o Secure & controlled

ADJACENCIES:

- o Central receiving
- o Timekeeper's office
- o Steward's office
- o Employees' locker rooms

LIGHT, AIR, VIEWS: Unnecessary w/exception of proper building ventilation, as space is transitory in nature

CONSIDERATIONS: Located in full view of supervisory personnel in order to provide security control

MATERIALS:

- o Concrete block (painted)
- o Concrete floor w/non-slip surface

LOADING DOCK & RECEIVING

SPATIAL REQUIREMENTS: 500 sq.ft.

QUALITY: Austere

CHARACTER:

CIRCULATION:

- o Service personnel
- o Tightly controlled, direct flow of goods to various storage facilities

ADJACENCIES:

- o Main kitchen facilities
- o Laundry facilities
- o All storage facilities used for storing receivables
- o Service elevators
- o Steward's office
- o Timekeeper's office

LIGHT, AIR, VIEWS:

- o Natural light not a necessity, nor views, as loading personnel would work in this area for short, transitory periods of time.
- o As with all service areas, the loading dock & receiving should be well ventilated.

CONSIDERATIONS:

- o Loading dock and approach well concealed on exterior of hotel.
- o Loading dock & central receiving should be removed from all areas of guest congregation.
- o Provide access to trucks ranging from 14' to 70' in length & above.
- o Dock area should be covered in order to receive deliveries during inclement weather.

MATERIALS:

- o Concrete block
- o Non-slip concrete flooring

GARBAGE ROOM

SPATIAL REQUIREMENTS: 300 sq.ft.

QUALITY: Austere, easily maintained & cleaned

CHARACTER: Stark

CIRCULATION: Accessed by service personnel only

ADJACENCIES:

- o Dishwashing area in main kitchen
- o Soiled linen room
- o Steward's office
- o Loading dock & receiving
- o Garbage chute from service rooms on all floors

LIGHT, AIR, VIEWS: Storage facility, therefore natural light, air, views unacceptable

CONSIDERATIONS:

- o Refrigeration
- o Easily cleaned & maintained
- o Removed from food preparation & storage
- o Direct access via garbage chutes on all succeeding floors
- o Easy removal from building via loading dock facilities
- o Fixed equipment--garbage compressor to alleviate security & supervision of the area

MATERIALS:

- o Concrete block
- o Concrete flooring

HOUSEKEEPING DEPARTMENT

SPATIAL REQUIREMENTS: Housekeeper's Office..... 100 sq.ft.
Linen Room & Storage..... 1000 sq.ft.
Furniture Storage..... 800 sq.ft.
Seamstress..... 100 sq.ft.
Total..... 2000 sq.ft.

QUALITY: Austere, easily maintained

CHARACTER: Industrial

CIRCULATION: o Service personnel--maids & porters
o Housekeeper & assistants

ADJACENCIES: o Laundry facilities
o Service elevator
o Receiving & loading dock

LIGHT, AIR, VIEWS: Transient work place, therefore unnecessary

CONSIDERATIONS: o File space
o Allocation of work assignments from housekeeper

MATERIALS: o Painted concrete block
o Non-slip concrete flooring

TIMEKEEPER'S OFFICE

SPATIAL REQUIREMENTS: 100 sq.ft.

QUALITY: Austere, economical

CHARACTER: Transparent

CIRCULATION: Hotel staff & service personnel

ADJACENCIES:

- o Steward's office
- o Service entry
- o Service elevator
- o Employee locker rooms

CONSIDERATIONS:

- o Necessary that timekeeper have visual access to the flow of service personnel entering & leaving area by way of service elevator or service entry.
- o After encountering timekeeper's office, employees should be separated into 2 traffic flows: food service personnel & everyone else. Food service flows should not interact with any other flow, with exception of waiters.

MATERIALS:

- o Concrete block
- o Concrete flooring

STEWARD'S OFFICE

SPATIAL REQUIREMENTS: 100 sq.ft.

QUALITY: Economical

CHARACTER: Transparent

CIRCULATION:

- o Hotel staff
- o Kitchen personnel

ADJACENCIES:

- o Steward's storeroom, storage facilities for comestables
- o Garbage
- o Receiving & loading dock
- o Timekeeper's office
- o Service entry
- o Kitchen facilities
- o Service elevator

LIGHT, AIR, VIEWS: None are necessary, although visual access to exterior a consideration.

CONSIDERATIONS:

- o Space for scale for incoming goods
- o Fixed equipment--scale
- o Filing space
- o Security
- o Supervisory capacity; therefore visual access to areas of service personnel, service elevator, locker rooms, service entry

MATERIALS:

- o Concrete block
- o Concrete flooring

EMPLOYEE LOCKER ROOMS

<u>SPATIAL REQUIREMENTS:</u>	400 sq.ft. ea. x 4 locker rooms..... 1600 sq.ft. total
<u>QUALITY:</u>	Austere, economical
<u>CHARACTER:</u>	Industrial
<u>CIRCULATION:</u>	Access to locker rooms by hotel staff & service personnel
<u>ADJACENCIES:</u>	- o Kitchen services - o Linen & laundry services - o Employees' cafeteria (eating area) - o Housekeeper - o Service entry - o Uniform storage - o Timekeeper
<u>LIGHT, AIR, VIEWS:</u>	Due to the nature of the locker rooms, visual & accoustical privacy being a major consideration, access to exterior, interior views unacceptable.
<u>CONSIDERATIONS:</u>	- o Locker rooms should contain ample toilet & shower facilities (included in above square footage). - o Designer should be aware of class distinctions between employees, hence the number of locker rooms. - o Locate with the intention of reducing travel time lost by employees.
<u>MATERIALS:</u>	- o Concrete block - o Ceramic tile - o Accoustical tile

LAUNDRY FACILITIES

SPATIAL REQUIREMENTS: 2000 sq.ft.

QUALITY: Austere, easily maintained & cleaned

CHARACTER: Industrial

CIRCULATION:

- o Maid service
- o Laundry manager
- o Housekeeper

ADJACENCIES:

- o Steward's office
- o Service entry
- o Service elevator
- o Soiled linen room
- o Vertical linen chute from service rooms on every floor
- o Valet service
- o Central receiving
- o Laundry manager
- o Uniform storage
- o Housekeeping

LIGHT, AIR, VIEWS: Proper ventilation required

CONSIDERATIONS:

- o Laundry will be required to do all hotel flatwork as well as employee uniforms, and valet service.
- o Dry cleaning services for guests.
- o Equipment needs are many and wide-ranging, and should be allowed for. It is necessary that the designer work w/laundry manager during planning stages so that the utmost in efficiency & quality control are maintained.
- o Ventilation systems & ambient room temperature important, as well as power use.

MATERIALS:

- o Concrete block
- o Ceramic tile
- o Accoustical tile

MAIN KITCHEN

SPATIAL REQUIREMENTS: 5000 sq.ft.

QUALITY: Economical, easily maintained & cleaned

CHARACTER: Industrial

CIRCULATION:

- o Head chefs & assistants
- o Short-order cooks
- o "Perimeter" circulation for waiters, room service personnel, dishwashers, & other service personnel

ADJACENCIES:

- o Restaurant
- o Banquet facilities
- o Convention room & service pantry
- o Beverage & liquor storage
- o Coffee shop
- o Auxiliary kitchen for coffee shop
- o Steward's office
- o Lounge (cocktail)
- o Storeroom
- o Loading dock
- o Service elevator
- o Employees' cafeteria

LIGHT, AIR, VIEWS: Exterior, natural light, a consideration but not a necessity; views are unacceptable.

CONSIDERATIONS:

- o The actual design of the kitchen is not within the scope of this project; therefore, only generalities w/regard to space allocation and sizing will be given.
- o Fixed equipment--extensive--consult kitchen engineer.
- o Hoods for exhaust over all cooking areas
- o Doors to dining areas should be strategically placed & baffled.
- o Toilet facilities within kitchen facilities

MAIN KITCHEN--cont'd.

CONSIDERATIONS (cont'd.):

Main kitchen facilities to include*:

- o Dishwashing area
- o Waiter pickup
- o Bake shop
- o Cold food area
- o Cooking area
- o Ice & water areas
- o Cold food storage
- o Pot washing
- o Dish trucks & rack area
- o Chef's office
- o Room service cart storage
- o Meat freezer
- o Meat refrigeration
- o Cold food trucks
- o Coffee
- o Hot food trucks
- o Dry food storage
- o Final cooking area

(*Note: All above areas included in pre-stated square footage. Kitchen space may be divided into an auxiliary kitchen.)

MATERIALS:

- o Easily cleaned, non-slip floor treatment
- o Ceramic tile
- o Extensive use of accoustical materials on walls & ceilings

MECHANICAL:

BOILER ROOM, FUEL STORAGE, TRANSFORMER VAULT

<u>SPATIAL REQUIREMENTS:</u>	Boiler Room.....	1800 sq.ft.
	Fuel Storage.....	200 sq.ft.
	Transformer Vault.....	250 sq.ft.

Note: "Complete" design of mechanical spaces or systems is not within the scope of this project.

Space is provided in order to facilitate boilers, water heaters, back-up systems, transformer vault and fuel storage.

It is anticipated that the fuel used would be electricity and natural gas in one form or another. Therefore, minimum "storage" is necessary w/the exception of wood storage for fireplaces that may be incorporated into the design of the hotel.

ADJACENCIES:

Centrally located as to minimize waste and boost efficiency

MAINTENANCE SHOP

SPATIAL REQUIREMENTS: 1000 sq.ft.

QUALITY: Austere, economical, easily cleaned

CHARACTER: Industrial

CIRCULATION: Maintenance workers, service personnel only

ADJACENCIES:

- o Boiler room
- o Service elevator
- o Receiving
- o Furniture storage

LIGHT, AIR, VIEWS: Unnecessary

CONSIDERATIONS:

- o Space should be divided equally among 3 areas:
 - Electrical shop
 - Plumbing shop
 - Carpentry & upholstering shop
- o Noise control--primary consideration

MATERIALS:

- o Concrete block
- o Concrete flooring
- o Accoustical tile ceiling

FURNITURE STORAGE

SPATIAL REQUIREMENTS: 800 sq.ft.

QUALITY: Austere, easily cleaned

CHARACTER:

CIRCULATION:

- o Maintenance
- o Service personnel

ADJACENCIES:

- o Housekeeper
- o Receiving
- o Maintenance shops

LIGHT, AIR, VIEWS: Unnecessary

CONSIDERATIONS:

MATERIALS:

- o Concrete block
- o Concrete flooring

CONVENTION/BANQUET SERVING PANTRY

SPATIAL REQUIREMENTS: 600 sq.ft.

QUALITY: Economical

CHARACTER: Those areas open to view from convention/banquet facilities should maintain character & decor of those spaces.

CIRCULATION:

- o Waiters
- o Food preparation personnel

ADJACENCIES:

- o Convention facilities
- o Main kitchen facilities

LIGHT, AIR, VIEWS: Unnecessary

CONSIDERATIONS:

- o Food assembly & pick-up area
- o Plate warmer, hot-top serving tables, refrigerators
- o Serving counters
- o Coffee urns

STEWARD'S STOREROOM

SPATIAL REQUIREMENTS: 1000 sq.ft.

QUALITY: Austere, economical

CHARACTER: Storage facility

CIRCULATION:

- o Steward
- o Kitchen staff
- o Service personnel

ADJACENCIES:

- o Kitchen facilities & storage areas
- o Steward's office
- o Receiving & loading dock

LIGHT, AIR, VIEWS: Unnecessary

CONSIDERATIONS:

- o Storage for dry food stuffs, canned goods, vegetables, dairy products & meat
- o Need for platforms, shelves, refrigerators & freezers

MATERIALS:

- o Concrete block
- o Concrete flooring

BEVERAGE STOREROOM

SPATIAL REQUIREMENTS: 400 sq.ft.

CIRCULATION:

- o Steward
- o Service personnel
- o Kitchen staff
- o Bar staff

ADJACENCIES:

- o Lounge area
- o Kitchen facilities
- o Convention facilities
- o Coffee shop
- o Dining room
- o Loading dock & receiving
- o Steward's office

CONSIDERATIONS:

- o Temperature control for various beverages
- o Security

EMPLOYEES' EATING AREA

SPATIAL REQUIREMENTS: 300 sq.ft.

QUALITY: Economical

CHARACTER: Quiet, semi-removed, relaxing

CIRCULATION:

- o Maids, porters, kitchen staff
- o All low-level service personnel
- o Waiters

ADJACENCIES:

- o Employee locker rooms
- o Main kitchen facilities

CONSIDERATIONS: Staggered eating schedules for employees controls overflow.

CONVENTION ROOM STORAGE

SPATIAL REQUIREMENTS: 600 sq.ft.

QUALITY: Austere, economical

CHARACTER: Storage facility

CIRCULATION: Service personnel

ADJACENCIES:

- o Convention room
- o Banquet facilities
- o Service elevator
- o Receiving & loading dock
- o Maintenance
- o Furniture storage
- o Convention room serving pantry

LIGHT, AIR, VIEWS: Unnecessary

CONSIDERATIONS: Storage for room dividers, presentation equipment, chairs, tables, etc.

MATERIALS:

- o Concrete block
- o Concrete flooring

SERVICE SPACE
(FOR INDIVIDUAL GUEST ROOM FLOORS)

SPATIAL REQUIREMENTS: 400 sq.ft./floor

QUALITY: Austere, economical

CHARACTER: Industrial

CIRCULATION:
o Room service
o Maids, porters

ADJACENCIES: Service elevator

LIGHT, AIR, VIEWS: Unnecessary

CONSIDERATIONS:
o Service elevator, laundry chutes, garbage chutes all should be contained inside.
o Storage for linens, cleaning equipment & supplies, toiletries, etc., maids' carts.
o Removed from guest interaction.

MATERIALS:
o Concrete block
o Concrete flooring

SERVICE ELEVATOR

SPATIAL REQUIREMENTS: One @ 80 sq.ft.

QUALITY: Austere, resilient finishes

CHARACTER:

CIRCULATION:

- o Service personnel
- o Maids
- o Maintenance personnel

ADJACENCIES:

- o Service rooms
- o Guest rooms

LIGHT, AIR, VIEWS: Unnecessary

CONSIDERATIONS:

- o Concealed inside service rooms
- o Able to withstand heavy industrial type use
- o Opens on all floors

MATERIALS:

- o Steel wainscoting
- o Non-slip, easily cleaned flooring

SUMMARY OF SPATIAL REQUIREMENTS

SUMMARY OF SPATIAL REQUIREMENTS

PUBLIC SPACES:

	<u>Sq.Ft.</u>
Lobby & Convention Foyer.....	4,500
Front Office/Guest Registration.....	470
Indoor Pool/Recreation Area.....	5,000
Men's Toilets for Guests.....	500
Women's Toilets for Guests.....	800
Coat Check Room.....	200
Corridors Adjoining.....	<u>1,500</u>
Total Public Spaces.....	12,970

COMMERCIAL SPACES:

Hair Salon.....	400
Gift Shop.....	400
Travel Agency.....	400
3 Additional Spaces.....	1,200
Commercial Storage.....	<u>1,500</u>
Total Commercial Spaces.....	3,900

FOOD & BEVERAGE SERVICE SPACES:

Main Dining Room.....	4,000
Main Kitchen w/Auxiliary.....	5,000
Coffee Shop.....	2,000
Service Entry.....	100
Loading Dock & Receiving.....	500
Garbage Room.....	300
Timekeeper's Office.....	100
Steward's Office.....	100
Convention/Banquet Serving Pantry.....	600
Steward's Storeroom.....	1,000
Beverage Storeroom.....	400
Employees' Lounge/Eating Area.....	300
Cocktail Lounge.....	1,800
Convention Room.....	6,000
Private Dining Rooms.....	1,800
Driver's Lounge.....	<u>300</u>
Total Food & Beverage Service Spaces.....	24,300

SUMMARY OF SPATIAL REQUIREMENTS--cont'd.

<u>GUEST ROOM SPACE:</u>	<u>Sq.Ft.</u>
312 Units @ 358 sq.ft. ea.....	111,618
Auxiliary Space (corridors, stairways, elevators, maids' closets, walls and partitions) = 40% of guest room space.....	<u>44,647</u>
Total Guest Room Space.....	156,265

GENERAL SERVICE SPACE:

Front Office/Administration.....	750
Service Elevator.....	80
Housekeeping Department.....	2,000
Employee Locker Rooms w/Restrooms.....	1,600
Laundry Facilities.....	2,000
Mechanical (boilers, fuel storage, transformers).....	2,250
Furniture Storage.....	800
Maintenance (electrical, plumbing, carpentry).....	1,000
Convention Room Storage.....	<u>600</u>
Total General Service Space.....	11,080

TOTAL SQUARE FOOTAGE.....	<u><u>213,515</u></u>
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PROBLEM STATEMENTS

STATEMENT OF THE PROBLEM

FUNCTION:

- o Because "back of the house" facilities should not interfere with guests, general public and administrative functions, it is necessary that they be physically, visually and accoustically segregated from each other.
- o Because "back of the house" facilities' circulation, quality control and security are most important to efficient hotel operation, they should be grouped together as a single entity, separate from areas of guest circulation, and able to be monitored by supervisory personnel.
- o Because the loading and unloading of foodstuffs, garbage and other goods essential to the operation of a hotel is a continuous operation in itself and may be visually objectionable to guests, loading facilities and service entries should be located and buffered accordingly.
- o Because the main kitchen acts as the heart of food and beverage service to patrons, it should be properly located with ease of distribution and service to all public food and beverage areas as a priority.

- o Because the site does not provide adequate area for all required parking and building, it may be necessary to utilize land (also owned by Sterling Investors) across Wisconsin Avenue for parking at peak use times.

FORM:

- o Because conformity with the character and fabric of Whitefish is a concern of the owner, it is necessary that any design maintain the integrity of the surrounding areas, locale and region.
- o Because the climate is characterized as cold, proper building massing, orientation, etc. is in order to capitalize on natural factors as a means to reduce cost of maintaining such a complex.
- o Because soil conditions are severe for a building of this type, special considerations must be given to foundations, below-grade facilities, etc.
- o Because of heavy snowfall and therefore winter roof loads, considerations must be made as to roof form, structure, drainage, etc.
- o Because of intensive constraints set forth by local and state zoning boards, strict adherence to greenspace boundaries, setbacks and height/distance ratios is a necessity.

- o Because the waterfront is an integral part of the community, it is necessary that considerable efforts be directed at maintaining the pleasing aesthetic and functional qualities of the site.
- o Because of the owner's stipulation that the hotel be of quality that is second to none in the region, quality construction and materials should be utilized.
- o Because it is anticipated that Hilton Hotels would manage this facility, it is necessary that room allocations, design and standards should strictly adhere to Hilton Hotels, Inc. design and planning standards.

ECONOMY:

- o Because the budget is more than adequate for excellent quality construction and site development, it is possible for the designer to be more liberal than is typical of most hotel projects. However, it is not without design implications.

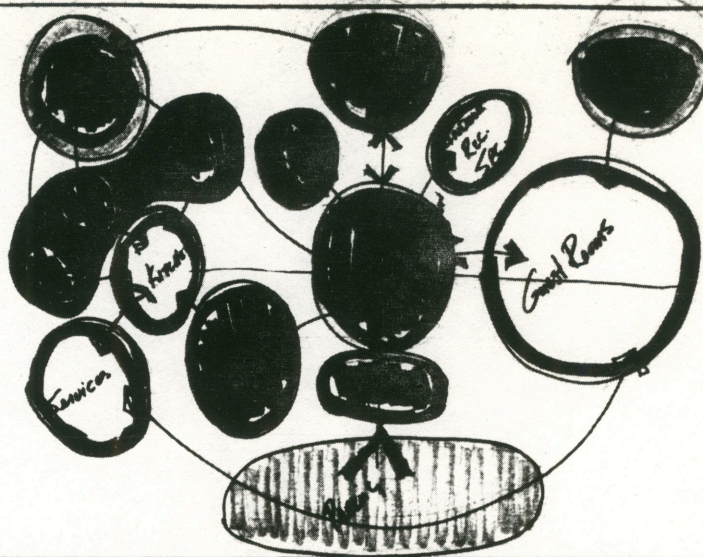
TIME:

- o Because funds are adequate for complete construction and site development, phasing of construction will not be a factor.

CONCEPTUAL SOLUTIONS

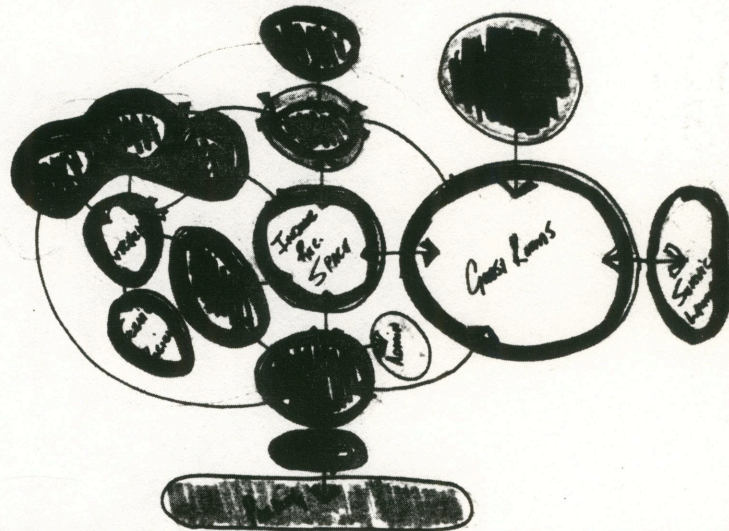
SCHEME A

- LOBBY AS CENTER
- SEGREGATION - GUESTS FROM GENERAL PUBLIC
- IMPLIED CROSS AXIAL CIRCULATION
- PRIVATE BEACHFRONT - GUESTS ONLY
- UNIFIED SERVICES
- GENERAL PUBLIC CORE



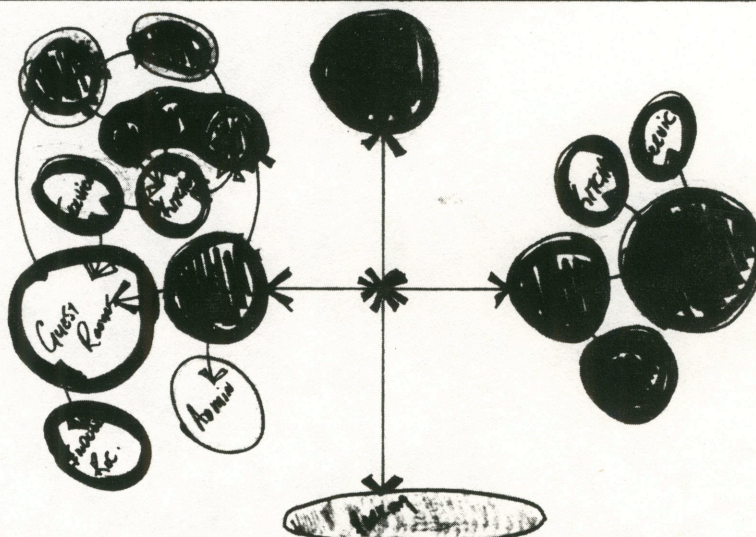
SCHEME B

- INDOOR RECREATION SPACE AS CENTER
- GENERAL PUBLIC CORE
- IMPLIED PERIMETER CIRCULATION
- SEPARATION OF SERVICES
- PRIVATE BEACHFRONT

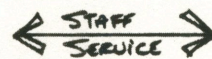
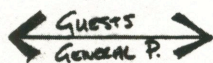


SCHEME C

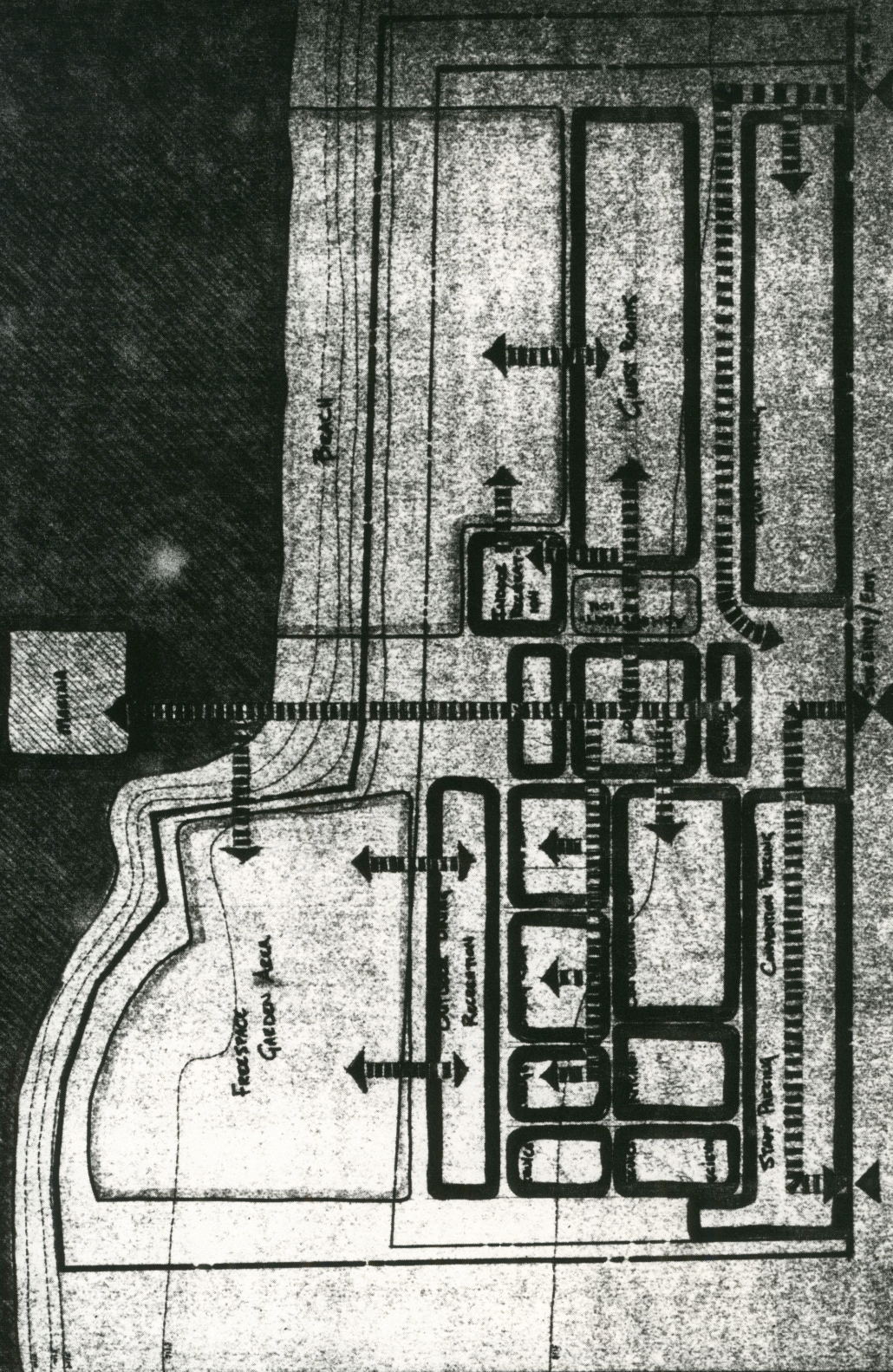
- SEPARATION OF CONVENTION FACILITIES FROM GENERAL PUBLIC & GUEST ROOM FACILITIES
- 2 LOBBIES
- IMPLIED CROSS AXIAL CIRCULATION SETS UP FOCAL PT.
- INDEPENDENT CIRCULATION PATTERNS



• ADMINISTRATION □ • SERVICE ■ • GUESTS ONLY ■ • GENERAL PUBLIC ■ •



ORGANIZATION · CONCEPTS

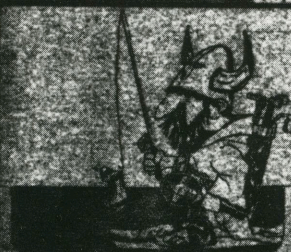
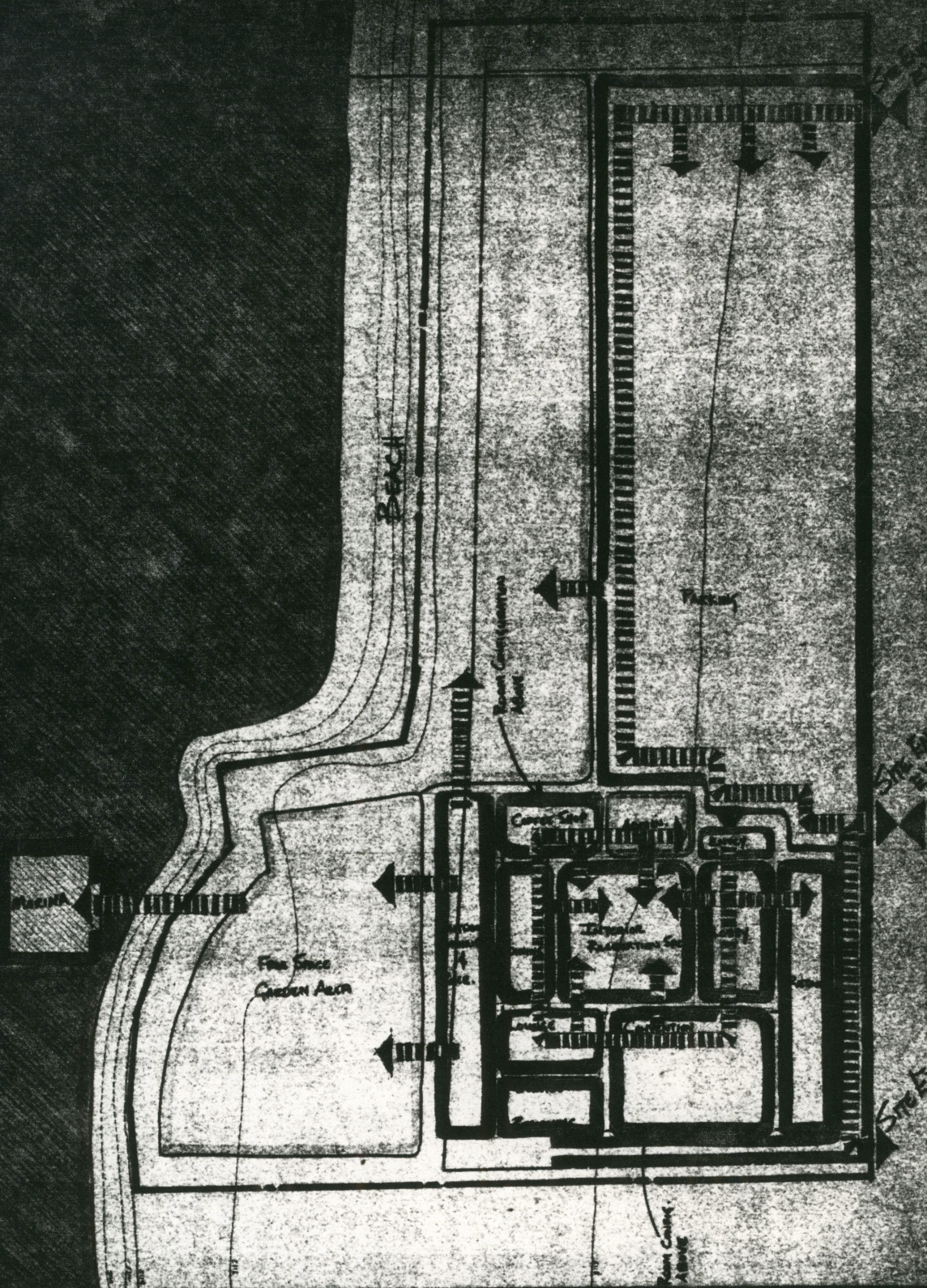


CONCEPT APPLIED

SCHEME A • WALL

VIKING

CONVENTION HOTEL WHITEFISH MONTANA



CONCEPT APPLIED

SCHEME B - PERIMETER

VIKING

CONVENTION HOTEL WHITEFISH MONTANA

BIBLIOGRAPHY

BIBLIOGRAPHY

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APPENDICES

APPENDIX A:
ZONING APPLICATIONS & AMENDMENTS

CITY OF WHITEFISH

APPLICATION FOR AN AMENDMENT TO THE CITY ZONING ORDINANCE TEXT OR MAP

*Name of Applicant Sterling Investments, Inc.

Address 1360 Wisconsin Avenue

Whitefish, MT 59937 Phone 406-862-3547

Does this request pertain to an amendment to the
text of regulations or zoning map? Zoning Map

IF THE REQUEST PERTAINS TO AN AMENDMENT TO THE
ZONING MAP, PLEASE COMPLETE THE FOLLOWING:

Application No. _____

Received by _____

Date _____

Checked:

☐ Fee ☐ Legal Description

☐ Map ☐ All Signatures

1 Address or general location of subject property Subject properties lie just to
the north of and adjacent to the Viking Lodge, between Whitefish Lake and Wisconsin
Avenue.

2 Size: 435'± ft. X 300'± ft. _____ sq. ft. 2.67± acres

3 Legal Description (Attach sheet for metes and bounds) _____

4 *Names and mailing addresses of persons owning property within the proposed change:

Sterling Investments, Inc.
Name

1360 Wisconsin Avenue, Whitefish, MT 59937
Address

5 *Names and mailing addresses of persons owning property within 300 feet of the
rear, side, and front of the lot or tract of land included in this request:

David W. & Darlene Y. Haines
Name

507 Canyon Gate Drive, Missoula, MT 59801
Address

David K. Eggebrecht

E. Howard & M. Pauline Eggebrecht

Benny Bee

Bertha Reich

Sterling Investments, Inc.

Donald E. & Mary Louise Bosshardt

P. O. Box 21012, Billings, MT 59104

P. O. Box 1156, Whitefish, MT 59937

185 Reservoir Road, Whitefish, MT 59937

1360 Wisconsin Avenue, Whitefish, MT 59937

165 Haskill Drive, Whitefish, MT 59937

*Attach sheet with additional names, signatures, or addresses if necessary

6 Present Zone WR-1 Proposed Zone WRB-2

7 What changed or changing conditions make your requested change in the zoning map reasonably necessary? Please see attached.

8 How will the proposed change accomplish the intent and purpose of:

1. Promoting the master plan Please see attached.

2. Lessen congestion in the streets and provide safe access Please see attached.

3. Secure safety from fire, panic and other dangers Please see attached.

4. Promote the public interest, health, comfort, convenience, safety, and general welfare Please see attached.

5. Provide adequate light and air Please see attached.

6. Prevent the overcrowding of land Please see attached.

7. Avoid undue concentration of population Please see attached.

8. Facilitate the adequate provision of transportation, water, sewerage, schools, parks, and other public requirements Please see attached.

9. Give reasonable consideration to the character of the districts Please see attached.

10. Give consideration to peculiar suitability of the property for particular uses Please see attached.

11. Protect and conserve the value of buildings _____

_____ Please see attached.

12. Encourage the most appropriate use of land by assuring orderly growth _____

_____ Please see attached.

IF YOUR REQUEST PERTAINS TO AN AMENDMENT TO THE TEXT OF ZONING REGULATIONS,
PLEASE COMPLETE THE FOLLOWING:

1 What is the proposed zoning text amendment that you are asking the City Council
to consider? _____

_____ Attach additional sheets if necessary

2 What changed or changing conditions make your proposed amendment reasonably
necessary? (Answer on page 2, item 7)

3 How will the proposed change accomplish the intent and purpose of the 12
criteria listed on page 2, item 8 ?(Answer on page 2, item 8)

THIS APPLICATION MUST BE ACCOMPANIED BY: (Items 1,2 & 4 do not apply to requests
to amend the text of regulations)

1. An accurate map, drawn to scale, showing the subject property(s) and
adjacent properties and their current uses. Map must also show street
names and points of general reference.
2. A complete and accurate legal description of the entire area to be rezoned.
3. A nonrefundable fee of \$200.00 (\$400.00 if mixed-use PUD; \$100.00 if part
of an annexation request) payable to the City of Whitefish.
4. If this request includes property other than that owned by the applicant,
application must be accompanied by a petition in favor of the request signed
by the owners of at least 65% of the land area included in the application.
Said petition shall bear the owners' signatures, addresses, legal description
and land area of each property represented on the petition, the total land
area represented by the petition, and the total land area of individual
properties included in the application.

I DECLARE UNDER PENALTY OF PERJURY THAT I AM THE OWNER OR AUTHORIZED AGENT OF
THIS PROPERTY AND THAT THE FOREGOING STATEMENTS, ANSWERS AND ATTACHED
DOCUMENTS ARE TRUE AND CORRECT.

Applicant

Date

FOR USE BY CITY ONLY.

\$ _____ application fee paid, receipt number _____

Dates hearing published _____ Paper _____

Date, place and time of hearing _____

ATTACH RECOMMENDATION OF THE WHITEFISH CITY-COUNTY PLANNING BOARD

Dates hearing published _____ Paper _____

Date acted upon by City Council _____

Decision of the City Council:

IF AMENDMENT IS APPROVED:

Number of Amending Ordinance No. A- _____

Date amendment entered onto official map or text _____

Official making entry _____

7. WHAT CHANGED OR CHANGING CONDITIONS MAKE YOUR REQUESTED CHANGE IN THE ZONING MAP REASONABLY NECESSARY?

The subject properties were recently purchased by Sterling Investments, Inc., the owners of the existing Viking Lakeshore Inn properties. The Viking properties are currently zoned WRB-2, General Resort Business.

With the addition of the recently purchased properties, Sterling Investments now desires to amend their site plan as previously submitted to allow for greater flexibility in site plan configuration. This new site plan would place the hotel complex further to the north, allowing for numerous benefits to be gained by the community as well as by the owners, such as buffer areas and more landscaped areas per area of building.

With the currently zoned WRB-2 properties only to deal with, re-development of a hotel facility allows for little more than the required setbacks for each side of the structure, and intensively utilizes the 320'± of lakeshore now zoned WRB-2. As Sterling Investments has now unified ownership of approximately a total of 735'± of frontage, they would like to "spread out" a bit, effectively reducing the intensity of impact on the frontage, and thereby minimizing the visual and aesthetic impacts on the area.

8. HOW WILL THE PROPOSED CHANGE ACCOMPLISH THE INTENT AND PURPOSE OF:

A. PROMOTING THE MASTER PLAN?

The rezoning of the subject properties as requested will serve to promote the Master Plan as will be outlined below.

The City of Whitefish did, in May of 1978, adopt Resolution # B-778, which implemented the Comprehensive Plan for the Whitefish Planning Area. This Comp Plan is known as "...Chapter 2 of the Flathead County Comprehensive Plan..."

The Comprehensive Plan Introduction clearly states that development be encouraged which "...strengthen[s] residential neighborhoods and the central business district, and that encourage[s] development of vacant land, yet provide[s] opportunities for commercial uses oriented toward resort services." (p 2-1, emphasis added). Again, the Plan states that "The economic vitality of the Whitefish...area depends on ...tourism [and] proximity to recreational areas coupled with the tourist facilities...contribute[s] to the increasing economic importance of tourism." (p 2-2) The portion of the Plan listing Economic Recommendations adds, "Vacant land should be utilized to provide diverse options for employment, residence, and recreation." (p 2-2)

The Comprehensive Plan addresses several areas of concern. Below are references to each of those areas of concern, with a commentary for each provided to link it to our request.

Community Facilities: The plan recommends (p 2-5) that "New development...should be encouraged in areas adequately served by municipal water and sewer lines." ~~There currently exists a 10" sewerage main and an 18" water main running parallel to the East boundary of the property. Adequate water and sewerage are therefore available.~~

Existing Land Use: "The influence of the...tourism...is reflected in existing land use patterns." (p 2-6) Also added is a statement to the effect that "...expansion of tourist facilities and related commercial services has occurred north along Wisconsin Avenue..." (p 2-6). This pattern is clear evidence that tourist and resort facilities will naturally develop near the amenity that is the primary attraction for an area. The Viking Lakeshore Inn is but one of many 'resorts' along Whitefish Lake, and has the distinction of now being virtually the sole survivor as the transition has been made from cabin camps to motels and hotels. To allow expansion of a tourist oriented facility in an existing tourist use location appears to be in keeping with the Comp Plan.

Future Land Use: The Land Use Plan portion of the Comprehensive Plan provides the greatest number of recommendations, two of which are given below:

" 5. Development opportunities for under-utilized land should be explored. (p 2-8)

" 6 New development should add...commercial...support such as...resort...facilities. (p 2-8)

In considering the first recommendation given above, that under-utilized land should be developed, we can easily see that to allow 2.67± acres of land fronting on Whitefish Lake, which has the reputation of having the most expensive lake frontage in the State of Montana, to lie idle is to under-utilize the property. Currently, the property has an old house which has been abandoned, a garage in marginal repair temporarily used as a boat storage facility, and a very low quality house that was moved in from Hungry Horse when the Bureau of Reclamation closed out most of the government housing following the construction of Hungry Horse Dam in the mid-fifties. Total value of the buildings would not exceed a few thousand dollars, and currently constitute an inappropriate use of the land.

Current zoning would permit, following an extensive subdivision process, a maximum of 19 single family dwellings, assuming the subdivision was done as a P.U.D. Without going through a subdivision process, five (5) single family dwellings could be constructed with the present zoning. Assuming P.U.D. approval, each lot would have to sell for an average of \$50,000 to \$75,000 each for the owner to recover his initial land cost plus costs of development. Without subdividing further, each of the existing five lots comprising the subject properties would have to sell for an average of \$100,000 to \$150,000 per lot.

While lots in the Whitefish Area, particularly those with frontage on Whitefish Lake, do sell for prices that may approach or exceed these prices, several factors do suggest that the zoning currently and arbitrarily placed upon these properties is not in the best interest of either the owners or the community, nor does it provide for Highest and Best Use of the property.

For example, there are vacant lots fronting on Whitefish Lake that are equal or far superior to any of the subject lots that are on the market for prices equal to or less than would be required were the owner to sell these lots, and these other properties apparently cannot be sold. Therefore, the marketplace seems to be indicating that the current zoning may have placed the property in a limbo wherein the owners cannot afford to develop the property as it is currently zoned, even if that was their intent.

Further analysis of the current zoning, taking into account the cost of purchasing a building site for a single family dwelling, either as is or following a P.U.D., suggests that overtones of Exclusionary Zoning may exist. Few residents of Whitefish, wherein the per capita income is \$7275 per year (1979) can afford building lots of this expense.

Therefore, one can deduce the current zoning not only would perhaps perpetuate an under-utilization of the land, it would continue to constitute an impairment to the owners as they develop their other properties, and would force the availability of its eventual use into a market representing a very minute or non-existent fraction of our society. Based on this analysis, the current zoning appears to be in direct conflict with the present Comprehensive Plan.

In comparison, the requested zoning classification, General Resort Business, would allow for the development of the subject properties to their very Highest and Best Use in conjunction with the proposal

to reconstruct the Viking Lakeshore Inn. This would insure development that was not an under-utilization of the land, and would comply with Recommendation # 6 of the Land Use portion of the Comp Plan by allowing the property to be utilized as a part of a well planned resort facility.

Comprehensive Plan Map: In conjunction with the Comprehensive Plan text for the Whitefish Area, a map entitled "City of Whitefish and Vicinity" (Map - 2) was provided which designates elements of the General Plan. This map designates areas in and around the community which should be intended for residential usage, commercial uses, industrial uses, and provides for the intensities of each such use. THIS MAP VERY CLEARLY DESIGNATES THE SUBJECT PROPERTIES AS BEING INTENDED FOR Commercial Services. Please refer to Map -2 of the Comp Plan.

The rezoning of these properties to the requested General Resort Business classification will bring the zoning for the subject properties into STRICT COMPLIANCE with the Comprehensive Plan for the Whitefish Community area. While the Zoning Commission recommendations which were presented to the City Council in the Fall of 1981 were deemed by them to "substantially comply" with the Comprehensive Plan, the zoning adopted finally on April 15, 1982 was diametrically contrary to the Comp Plan for the subject properties, and may be considered therefore to be subject to question. The rezoning as requested will serve to promote the Master Plan (Comp Plan) by correcting the deficiency.

SUMMARY:

The requested rezoning action can be defended by many aspects of the Comprehensive Plan, both in the text and on the map. To grant the requested General Resort Business classification will serve to correct a specific instance of non-compliance in the existing zoning, and will promote the Comprehensive Plan by bringing the Zoning Plan back into compliance.

In addition, the rezoning to the WRB-2 will allow development of the Sterling Investments properties to properly utilize the land to its Highest and Best Use, will contribute to the economic vitality of Whitefish, will provide tourist facilities proximate to the recreational areas, in particular Whitefish Lake, and is a logical extension of an already existing and approved land use of adjacent properties which virtually encompass the subject properties.

B. LESSEN CONGESTION IN THE STREETS AND PROVIDE SAFE ACCESS?

The new zoning (WRB-2) would allow the development of a resort facility on an expanded site. The site currently is 320'± in width, by some 465'± deep. Present plans for redevelopment call for continued ingress and egress at the points currently existing for the Viking Lakeshore Inn. With an expanded site permissible, these points of ingress and egress will be spread out, with probably no more than three accesses to the property. Under the existing zoning, as many as five (5) additional ingress and egress points will access Wisconsin. By eliminating the need for at least four of these access points, congestion in the streets will be lessened, and safety will be increased.

Wisconsin Avenue is of sufficient width to accommodate the traffic now existing, and will be adequate for many years to come. Rezoning to allow movement of the hotel structure to the north will not affect traffic on Wisconsin in any appreciable way other than that noted above.

C. SECURE SAFETY FROM FIRE, PANIC, OR OTHER DANGERS?

The change in zoning from WR-1 to WRB-2 will not appreciably affect dangers from fire, panic, etc. Any facility proposed will undoubtedly be sprinklered and equipped with fire and smoke alarms, actually reducing the potential for personal danger that could occur should the property be developed as single family residential, which may not have the safety features a public facility would have. A resort facility would also have greater setbacks from the property lines than those required in residential uses, and would thereby lessen the danger of a fire spreading from one structure to an adjacent one.

D. PROMOTE THE PUBLIC INTEREST, HEALTH, COMFORT, CONVENIENCE, SAFETY,
AND GENERAL WELFARE?

The requested rezoning will serve to promote the public interest, etc., by offering a major tourist facility located on Whitefish Lake that would be sited on an extensive frontage property. This would lessen the visual and aesthetic impact of placement of the hotel, and would serve to lessen congestion on the beach, thus preventing or minimizing the prospect of hotel guests encroaching on neighboring properties.

As this property will be within the corporate limits of the City of Whitefish, all city services will be available, including water and sewerage, thus promoting the general health and welfare of both guests of the facility and of the community as a whole.

E. PROVIDE ADEQUATE LIGHT AND AIR?

The requested zoning will permit shifting of the hotel to the north which will allow for more open space to the south. Basically, the rezoning will allow approximately the same sized hotel to be constructed on 5.72 acres rather than on 3.05 acres. Much of this additional acreage would be in landscaped areas, or areas provided for outdoor recreation; thus, the adequacy of light and air to surrounding properties will be enhanced.

F. PREVENT THE OVERCROWDING OF LAND?

The Master Plan designated this property, along with others in the area, as intended for Commercial Services. "Areas designated commercial provide for a range of activities from Neighborhood Shopping to General Business and office use as well as resort and recreational uses." (p 2-8, emphasis added). As it appears resort uses were anticipated in the Comprehensive Plan for this area, it would be reasonable to suggest the development of such would not be an act of overcrowding of the land beyond that which was deemed proper in the Comprehensive Plan.

In fact, the rezoning will alleviate the appearance of overcrowding of the present Viking Lakeshore Inn properties by allowing the same general facility to be spread out over a much larger parcel.

G. TO AVOID UNDUE CONCENTRATION OF POPULATION?

The new zoning would prevent an undue concentration of population by allowing the presently planned Viking redevelopment hotel to be "spread out". Again, as the new zoning complies with the Comprehensive Plan Map-2, it would not cause a concentration of population beyond what was designated for the area.

H. FACILITATE THE ADEQUATE PROVISION OF TRANSPORTATION, WATER, SEWERAGE, SCHOOLS, PARKS AND OTHER PUBLIC REQUIREMENTS?

TRANSPORTATION: The site is adequately serviced by FAS 487 (Wisconsin Avenue). As its primary market, the facility would serve persons who will be coming to the area for other reasons, i.e. skiing, boating, golfing, etc., the increase in traffic directly attributable to this proposed development should not exceed the design capabilities of the streets and highways in the area. Nor should the traffic be considered to be traffic that would not be in the area irregardless, as most of that traffic will be coming to Whitefish for other reasons mentioned, anyway.

WATER: A water main borders the property with a sufficient capacity to serve the developable potentials allowed under the new zoning.

SEWER: The gravity flow sewer main bordering the property is adequate to handle the anticipated flow.

SCHOOLS: As the occupants of the intended facility to be constructed on this site will be transient/tourist, no impact on schools will be forthcoming. Additional tax revenues will be available to the schools. Indirectly, the employees working at a new tourist facility may have children which will impact the schools, but this impact will have been addressed in whatever housing is occupied by those employees.

PARKS: The impact of the new zoning will be to allow the development of resort facilities which will serve to lessen the pressure and the congestion at existing public parks and facilities, particularly those few located on the Lake. Rather than being a negative impact, this one aspect alone is sufficiently important to be given strong consideration. Tourist facilities, i.e. overnight accommodations located elsewhere in the community but not on the Lake, will add to the pressure placed on our existing facilities and accesses on Whitefish Lake, whereas the same facility located on the subject properties will be providing their own access and beach areas.

POLICE: No extra-ordinary demands on the police are anticipated. As congestion at other public beaches, etc., may be lessened, any increase in service required under the new zoning may be offset by that lessened demand elsewhere. In any event, an increase in service should be offset as well by the increase in tax revenues, directly and indirectly, to the City of Whitefish.

FIRE: Fire protection will be provided for by the Whitefish Volunteer Fire Department. The rezoning will result in structures of a commercial nature, which will be sprinklered, and meet all fire codes. The scope of activities permissible on the grounds of whatever tourist facility is constructed will be more fully supervised and controlled than would be the case currently or if the land were developed as single family residential.

9. GIVES REASONABLE CONSIDERATION TO THE CHARACTER OF THE DISTRICT?

Two aspects of this issue should be addressed: 1) Does the new zoning give reasonable consideration to the character of the DISTRICT? and 2) Does the new zoning give reasonable consideration to the character of the AREA?

1) Does the new zoning consider the DISTRICT? The subject property now lies in WR-1 Single Family Zoning District. The WR-1 District is intended for residential purposes to provide for single family or duplex dwellings in an urban setting serviced by all community and/or public utilities and facilities. [4.05.010 Whitefish Zoning Regulations] Residential Purposes is defined as "The intent to use and/or the use of a room or group of rooms for the living, sleeping, and housekeeping activities of persons on a permanent or semi-permanent basis of an intended tenure of one month or more." [2.19.11]

A review of the WR-1 District in which the property is situated shows that of the thirty-five (35) property owners in the District, only ten (10) appear to be primary residences occupied by the owners. The other twenty-five (25) are either rental properties or are occupied as secondary or vacation residences. Twenty-four (24) of these are owned by non-residents of Whitefish. Fully 67.65% of the owners in this District are not full time Whitefish residents, and can be presumed to own because of proximity to the Lake and the availability of recreational opportunities. To suggest that this established WR-1 zone, with an ownership profile such as exists, and being surrounded by WRB-1, WRR-1, and WRB-2 zones, is a typical WR-1 Single Family Residential neighborhood is stretching the imagination to its utmost. The existing usage of this entire district appears to be more in keeping with a resort designation than it does to a residential designation.

Therefore, a resort classification for the subject properties is in keeping with the existing resort-oriented character of the neighborhood and of the DISTRICT. In fact, the permanent residences in the District may actually be out of character with the predominant character of the entire District as it now exists.

2) Does the new zoning consider the AREA? The Viking Lakeshore Inn lies directly south of the subject properties, and offers 40± units as well as a bar and restaurant facility. This facility and acreage owned east across Wisconsin Avenue are slated for a major hotel/condominium project in the near future. This project will entail the entire designated WRB-2 District. The subject properties share approximately 658' of common boundary with the WRB-2 zoning district for that area. With the Lake to the west, and WRB-2 zoning on two sides, the subject property as it currently is zoned appears to be zoned out of character with the area, when you add to this the resort nature of the residential district in which it presently lies.

On a broader basis, one can clearly see the subject properties and the entire district in which it lies is virtually an island of WR-1 surrounded by Resort Zoning Districts.

10. GIVES CONSIDERATION TO PECULIAR SUITABILITY OF THE PROPERTY FOR PARTICULAR USES:

This property is located between FAS 487 and Whitefish Lake's Monks Bay. Historically, the Lake has attracted tourists, and many tourist cabin camps developed along the Lake. Monks Bay was the site of at least three such cabin camps. In keeping with changing travel and vacation trends, these cabin camps were gradually displaced with "motels". The Viking Lodge was the first "motel type" such facility built on Whitefish Lake. With its location on a narrow strip of land between the highway and the Lake, this property appears to be more suited to its Master Plan designated use than it is to its presently zoned usage. As the Viking is the only such facility on Whitefish Lake, it appears reasonable to allow its expansion to encompass a larger parcel of land by granting the rezoning.

11. PROTECT AND CONSERVE THE VALUE OF BUILDINGS:

As the only buildings on the property are of minimal value, and will be removed prior to any development of any type, no safeguards need be taken to safeguard the value of existing buildings. The only buildings immediately adjacent to the area to be rezoned consist of the Viking Lakeshore Inn structures, which are also slated for removal or demolition. The properties immediately to the north are vacant, a summer cabin, a rental house, and a single family residence. With the provision of additional open space and landscaped areas offered by a larger development site that the rezoning will permit, impact on existing and future adjacent properties and buildings will be minimal, and the rezoning will thereby serve to protect and conserve the value of nearby buildings and/or future buildings.

12. ENCOURAGE THE MOST APPROPRIATE USE OF LAND BY ASSURING ORDERLY GROWTH:

Major hotel/convention center complexes often generate more accommodation facilities in a spin-off fashion. An example is the many motels surrounding the Outlaw Inn in Kalispell. The subject properties are ideally suited for just such a "second generation" overnight facility. A rezoning now will incorporate the subject properties into a unified development plan under one owner and will preclude the possibility of rezoning several years down the road which might permit such a spin-off "economy" overnight facility. Therefore, rezoning now, with the properties under a unified ownership with the Viking Project, will allow both a most appropriate use and will provide for the very best of orderly growth. In addition, that growth will again be in keeping with the Master Plan designation for the area.

PROPOSED ZONING AMENDMENT TO ALLOW FOR AN ALTERNATE HEIGHT LIMITATION

The following zoning amendments are proposed as a means of permitting in certain commercial zoning districts provisions for buildings taller than currently permitted.

17.17.180 - Amend to read:

BUILDING HEIGHT - The vertical distance measured from the average level of the highest and lowest point of that portion of the lot covered by the building to either a) half the height of the gable portion of the building, or b) to the highest point of the parapet wall on flat roofs, excluding elevator shafts, fireproof stairwells, mechanical units, or mechanical penthouses centrally located on the roof with an area not exceeding twenty-five (25) percent of the total building area.

17.17.185 - Added definition:

BUILDING-HEIGHT CONTROL ANGLE - That angle established to control the relationship between the height of a building or structure and its setbacks from the property boundary lines.

17.17.186 - Added definition:

BUILDING-HEIGHT CONTROL LINES - Lines extending upward from lot boundary lines at an angle appropriate to the Use District within which the lot or parcel lies, and which, when extended to their common meeting point, establish the Building Envelope for that specific lot or parcel.

17.23.020 - Delete entirely.

17.41.050 - Added chapter to General Provisions affecting Use Districts:

The following standards shall apply to those Use Districts wherein building or structure height is controlled by means of a permissible building envelope rather than by a fixed height limitation.

1. The building envelope shall consist of that three dimensional volume of space contained within the extension of building-height control lines at the angles provided for each applicable Use District.
2. Building-height control lines shall be computed from a beginning point at the property boundary or lot line of the parcel upon which the building or structure is to be located.
3. No portion of any building or structure shall extend beyond the building envelope except those specifically excluded from height limitations.

4. The height-distance angles for each applicable Use District shall be as follows:

	<u>Front</u>	<u>Rear</u>	<u>Side</u>
a. WB-1	60°	90°/60° ¹	90°/60° ¹
b. WB-2	50°	70°/60° ¹	90°/60° ¹
c. WB-3	70°	90°/80° ¹	90°/80° ¹
d. WRR-1	70°/55° ²	60°/45° ³	60°/45° ³
e. WRR-2	70°/55° ²	60°/45° ³	60°/45° ³
f. WRB-1	70°/55° ²	60°/45° ³	60°/45° ³
<u>g. WRB-2</u>	<u>70°/55°²</u>	<u>60°/45°³</u>	<u>60°/45°³</u>
h. WI	80°	80° ⁴ /70° ⁵ /60° ⁶	80°

Notes:

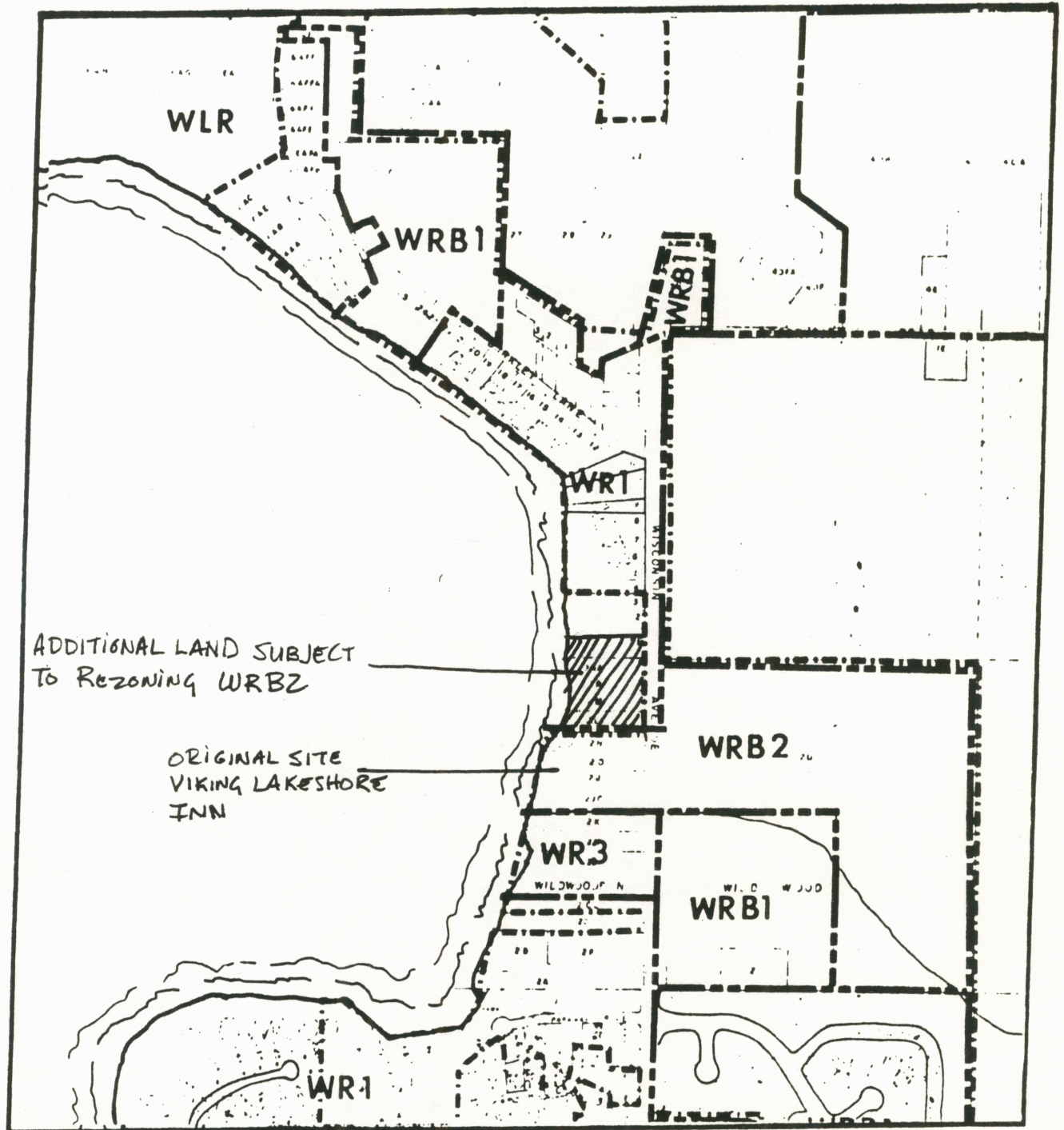
- 1 - If abutting a residential zone.
- 2 - If abutting a public street right-of-way.
- 3 - If abutting the lakeshore.
- 4 - If abutting an alley.
- 5 - If abutting a public street or highway.
- 6 - If abutting a residential or resort district.

5. All building envelope calculations shall be computed based on a Certificate of Survey (COS) or Final Plat recorded at the Office of the Flathead County Clerk and Recorder. Said COS or Plat shall show exact property boundary dimensions.

6. Included with the architectural drawings and specifications submitted to the Building Inspection Department shall be a complete set of drawings showing the elevations of each building or structure depicting to scale setbacks from lot boundaries and height-distance control lines at the angles set forth in Paragraph 4 above.

7. Prior to issuance of any Building Permit, the Zoning Administrator shall certify by letter that he has reviewed the submitted architectural elevations and that the proposed buildings or structures are in compliance with the building envelope parameters for the tract of land upon which they are to be built.

WHITEFISH CITY ZONING CLASSIFICATIONS



APPENDIX B:
HILTON PLANNING & DESIGN STANDARDS



**PLANNING AND DESIGN STANDARDS
GUEST ROOMS AND RELATED AREAS**
HILTON HOTELS CORPORATION

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INTRODUCTION

The measure of success in hotel operations is dependent, almost wholly, upon two prime factors — astute planning and effective management. It is virtually impossible to achieve the latter without the former and consequently, it is vitally important that planning and design programs adhere to time-tested and proven concepts

Since its inception many years ago, Hilton's Planning and Construction Department has devoted extensive time and effort to the development of acceptable architectural and design standards for typical guest rooms, multi-purpose rooms, suites and corridors. Although there are well-designed rooms across the country which do not follow these standards, we have incorporated innovative configurations and amenities which convey image factors unique to Hilton.

At our corporate headquarters, in Beverly Hills, California, we maintain a research and design structure functioning as a 'working laboratory' for the development and testing of criteria and the display of model rooms.

The following written data and illustrations convey, graphically and dimensionally, minimum planning and design standards for those areas to which all architectural/engineering plans and specifications for Hilton properties must conform.

ROOM TYPES DISTRIBUTION ANALYSIS

Preliminary architectural plans which have been approved by the regional office and Hilton's Director of Planning and Construction, are submitted to the corporate offices for analyses:

- Room Numbering System

- Distribution and Types of Typical Rooms

- Distribution and Types of Special Accommodations

- Distribution and Types of Suites

- Location of Communicating Doors

- Room-Rate Programming

The foregoing analysis is predicated on marketing studies prepared by retained consultants, coupled with specialized considerations for the specific property. Generally, Hilton's distribution format for rooms, exclusive of suites and other special accommodations, is:

- 70% Double/Doubles

- 20% Kings

- 10% Pivots (Studio/Doubles)

Subject to specific analysis, approximately 50% of the Typical Rooms are designated 'connecting' or 'communicating'. In a 300-room property, for example, 150 rooms will 'communicate' (75 sets of connecting doors).

DESCRIPTIONS — TYPICAL ROOMS, SPECIAL ACCOMMODATIONS/SUITES

TYPICAL ROOMS

Double/Double — See Plate I

Two 4' - 6" wide beds separated by a nightstand and containing a chest of drawers, a game table with two comfortable occasional chairs and other furnishing elements shown on the plans.

King — See Plate I

One 6' - 6" wide bed, flanked by two nightstands. Other furnishings are identical to those in the Double/Double room.

Pivot (Studio/Double) — See Plate I

An L-shaped parlor/sleeping room with a custom-fitted 4' - 6" 'day bed' and a comfortable sofa bed, separated by a desk/vanity unit. Additionally, the room will contain a chest of drawers, a comfortable lounge chair, a coffee table and other indicated furnishings.

The pivot room is virtually always programmed as the 'parlor' of a potential 3-room accommodation, with a connecting king and/or double/double bedroom.

This unique and versatile room is, in effect, a one-room suite and is particularly well adapted for use as an executive accommodation or as a 'family' room.

SPECIAL ACCOMMODATIONS

Wall Bed — See Plate II

One counter-balanced, retractable bed unit (Sico or equal), 4' - 6" wide with an adjacent desk/chest unit and other indicated furnishings.

As the plan illustrates, these accommodations are designed in pairs for the most-effective utilization of space.

The rooms are convertible, in minutes, from standard sleeping rooms to small meeting rooms for 10 to 15 people. The transition is made without removing furnishing items.

Due to its unique shape, the wall bedroom can be marketed as a 'premium single' and should be maintained in a bedroom configuration until needed for a meeting facility.

Multi-Purpose — See Plate III

A convertible one-room suite/function room composed of two guestroom modules. The plan illustrates two adjoining multi-purpose rooms — one shown as a well-appointed suite, with two double beds, and the other as a conference room with a portable boat-shaped table and 12 commodious executive chairs. When desired, the function room can be set up with banquet tables and chairs to accommodate 25 to 30 people.

By converting one of the guestroom baths to a wet-bar, the meeting room adapts, graciously, into a private dining room in which instance the spacious entry foyer can serve as a staging area for food service. Note that a pair of imposing, out-swinging entry doors have been incorporated to add 'stature' and to facilitate furnishing changes.

Where conditions permit, multi-purpose and wall bedrooms should be located on the floor level containing the main kitchen, restaurants and banquet rooms, so that food and beverage can be served effectively. A storage room should be provided, in a convenient location, for banquet tables, stacking chairs, audio-visual equipment, etc.

Multi-purpose rooms require supplementary ceiling lighting. Architect shall review recommended layouts with Hilton (recessed and/or surface mounted).

SUITES

Luxury — See Plate V

One of many furnishing layouts is illustrated — a two-module parlor/dining room with communicating double/double and/or king bedroom.

The parlor/dining room can be sold, independently, as an entertainment parlor or as an over-night sleeping accommodation with sofa bed.

Townhouse — See Plates VII and VIII

The bi-level 'Townhouse' or 'duplex studio' contains a convertible parlor/bedroom on the lower level and a traditional bedroom, usually a king, in the 'loft' or upper level. Two types are illustrated — spiral stair and straight stair. Communication between the two levels is by an 'internal' stairway but each level is accessible, independently, from the two adjoining corridors.

These interesting and dramatic suites are used sparingly because the 'atrium' configuration precludes marketing each level separately.

ARCHITECTURAL CRITERIA — ROOMS

CONFIGURATIONS/DIMENSIONS — See Plate I

1. The illustrated geometric configurations are mandatory — 'indented' entry doors, closet adjacent to bath and broadside to corridor, etc.
2. Typical rooms shall be 13' - 0" wide x 18' - 0" long (net inside dimensions) exclusive of bath and entry foyer. Rooms with two queen beds (used infrequently) require a minimum length of 19' - 0".
3. The room width (13' - 6" on center) is not needed to accommodate the illustrated furnishings but is required to achieve the spacious entry foyer delineated on the plans. The entry foyer configuration permits the inclusion of bar/lavatory units and other optional elements shown on Plates IX and X.
4. The accompanying plans provide for a 5' - 0" wide bathroom and a 3' - 0" wide entrance door. The widths of the plumbing/vent shafts and the closets are 'variable' but a minimum closet width (inside dimension) of 3' - 0" is mandatory.
5. Minimum permitted ceiling height in sleeping area shall be 8' - 0".
6. Suspended ceilings over baths, closets and entry foyers are recommended but not mandatory. Minimum suspended ceiling heights shall be 7' - 0".
7. Fan/coil, multi-pipe HVAC units, when installed in suspended ceiling areas, shall be mounted in the plenums above the entry foyers so that the supply grilles will be remote from the bed walls.

Where 'thru-wall' HVAC units are specified, they must not be installed in the window walls immediately adjacent to the bed walls, but should be positioned, preferably, in solid walls (floor to ceiling) immediately opposite the room entry doors (see king bedroom on Plate I). This will prevent convection currents from discomforting sleeping guests.

In the event that thru-wall units are installed in bulkheads below windows, it is recommended that the units be contained within wall-to-wall enclosures to permit acceptable drapery installations of blackout and casement fabrics, with floor-to-ceiling installation of the decorative overdrapes which will be installed immediately forward of the closures.

8. Wet bars — (Plate VI) and convertible vanity/lavatories (Plate IX) shall be detailed and specified in the architectural contract documents.

Decorative finishes (plastic laminate, wall and floor materials, etc.) will be supplied to the architect, by Hilton, as part of the interior design program for the rooms and related areas.

FINISHES — WALLS, FLOORS AND CEILINGS

1. All walls in the guestroom entry foyer and closet shall be covered in serviceable-weight wall vinyl, 12 ounces per square yard. The vinyl shall be installed 'floor to ceiling' to off-set the need for bases.

Applied carpet bases, 4" high, may be specified, if desired, but should not be installed with cap mouldings. Exposed edges of carpet can be coated with clear cement to avoid raveling.

2. All floor areas (with exception of baths) in typical rooms, including entry foyers and closets, shall be carpeted.
3. Suspended ceilings over baths, closets and entry foyers shall be 'drywall', prepared for painting — smooth or sand finish. The ceiling in the sleeping area is to be prepared for painting — smooth or sand finish. The use of integrally-colored, spray-applied textured plaster will be permitted only where irregularities in the underside of poured-in-place concrete slabs necessitate a finish of this nature.
4. Acoustical tile ceilings, of any nature, will not be permitted in any portions of the guestroom buildings — rooms, baths, corridors and elevator foyers. It will be the architect's responsibility to convey this hard and fast ruling to the mechanical and electrical engineers who may request 'lay-in' tile installations in certain areas, to facilitate accessibility to mechanical and/or electrical devices.

DOORS

1. Guestroom entry doors shall be 3' - 0" x 6' - 8" / 7' - 0" x 1 $\frac{3}{4}$ ", solid core, with hardwood veneer surfaces suitable for painting. Metal frames are acceptable but hollow metal doors will not be approved.
2. All entry doors must be equipped with Hilton-approved locksets, security locks and 'peek-hole' devices.
3. Communicating rooms shall have one set of two doors, 2' - 8" x 6' - 8" / 7' - 0" x 1 $\frac{3}{4}$ ". Doors shall be solid core, flush panel with hardwood veneer surfaces suitable for painting. Doors shall be mounted in double-rabbed frames and acoustically sound-stripped.

Doors shall be equipped with Hilton-approved latchsets and security locks.

4. All secondary doors to balconies, as well as ground floor doors to parking and recreational areas, shall not be equipped with automatic locking devices to avoid inadvertent guest lock-outs. These doors shall be keyed-alike to the entry doors and must, also, be equipped with chain-locks and other Hilton-approved security devices.

ARCHITECTURAL CRITERIA — BATHS

See Plates IX, X and XI

The make-up and appearance of the bath area is equally important as the remaining portions of the guestroom. The hotel room serves as a 'home away from home' for the traveler and it is Hilton's desire and intent to provide its guests with comfortable and pleasing accommodations.

It is relatively simple to achieve a 'domestic' appearance in a guestroom, but considerably more difficult to 'de-institutionize' the bath, while retaining maximum maintenance-free elements. The illustrated planning and design formats have, we feel, attained the desired end results — results which have been confirmed, eloquently, in the thousands of these baths constructed in recent years in Hilton hotels across the country.

The configurations and dimensions shown on the accompanying plans, coupled with the criteria listed below, must be adhered to, meticulously:

1. The minimum size of a Hilton bath shall be 5' - 0" wide x 8' - 0" long.
2. The ceiling over the bath (and the entry foyer) may be suspended to a minimum height of 7' - 0". The ceiling may be painted (smooth or sand finish) or covered with wall vinyl to minimize continuing maintenance.
3. All baths in typical rooms must contain the three primary plumbing fixtures — tub/shower combination unit, water closet and vanity/lavatory unit. A 'second' lavatory, when specified, may be added in the entry vestibule.
4. Tubs/showers:
 - a) Minimum tub size shall be 2' - 6" x 5' - 0" x 1' - 4" high.
 - b) Material — porcelain over cast iron with integral non-skid bottom surfaces. Steel tubs are not recommended.
 - c) All typical guestrooms must have combination tub/shower units. Independent shower stalls may be specified only in addition to tubs but not in lieu thereof.
 - d) Fiberglass tub/shower units, with integral or independent wainscot panels, are permitted but drawings and specifications must be submitted to Hilton for review and approval prior to incorporation into working drawings and specifications.

5. Water Closets:

- a) In order to maintain non-institutional appearances, tank-type water closets are recommended — one or two piece, with elongated fronts. In the interest of conservation, 'water-saver' units are recommended.
- b) All water closets are to be fitted with elongated toilet seats and covers.
- c) Special units are available and recommended for handicapped rooms.

6. Vanity/Lavatory Units:

- a) Tops may be plastic laminate, DuPont Corian, genuine marble or 'cultured' marble. Applied or integrally-moulded back splashes are required. Sides splashes are optional.
- b) Plastic laminate tops shall have 'top-set' china lavatories. Corian and marble tops may have integrally-moulded or under-set lavatories.
- c) Removable, full plastic laminate fronts with recessed toe bases are recommended. Fixed 'aprons', if specified, must have a minimum height of 12" (to conceal P-trap).

7. Flooring:

- a) Ceramic tile with 4" high ceramic tile base or marble with 4" high marble base.
- b) Sheet vinyl not recommended (subject to loosening and curling by water-penetration at perimeter edges).
- c) Resilient tile (asphalt, vinyl/asbestos, rubber, vinyl, etc.) and terrazzo not acceptable.

8. Wall Finishes:

- a) Where cast iron or steel tubs are specified, the wainscot around the tub/shower enclosure shall be ceramic tile to a minimum height of 6' - 6" above the finished floor or, preferably, to the ceiling.

Tile wainscot is not to be used on wall areas other than the tub/shower enclosure.
- b) Cultured marble wainscot, or equal, may be substituted for ceramic tile, in which case drawings and samples must be submitted to Hilton for approval prior to incorporation in working drawings and specifications.

8. Wall Finishes: (Continued)

- c) Remainder of wall surfaces in bath must be covered with wall vinyl (specified by Hilton as part of the guest room interior design package).

9. Lighting/Mirrors:

Refer to Plates IX and X for acceptable installations — framed mirrors with flanking incandescent sconces, frameless mirrors with 'integral' flanking fluorescent fixtures and 'wall-to-wall' mirrors with 'luminous' overhead fluorescent lighting.

Horizontal 'strip light' fluorescent fixtures mounted on walls above mirrors and surface-mounted fluorescent fixtures on ceilings above lavatories are not acceptable.

10. Accessories:

All baths in typical rooms must contain the following accessories:

See Plates IX and X for locations.

- (1) 18" towel bar mounted on plumbing chase wall at vanity.
- (1) 24" towel rack mounted on wall at rear of tub.
- (1) Double-prong robe hook mounted on inside of bath door.
- (2) Semi-recessed toilet tissue holders, mounted one above the other, as shown on plans — one to contain a roll of tissue in use and the other, a wrapped spare roll.
- (1) Retractable clothes line (Franklin brass no. 910, or equal) mounted inside tub area.
- (1) Utility cabinet containing shelf for tumblers and wash cloths, bottle opener, facial tissue dispenser and used razor blade slot (Bobrick no. B-383, or equal).

In rooms containing bar/lavatory units, one each additional utility cabinet and 18" towel bars are to be provided in locations shown on the plans.

All accessories listed above, other than the stainless steel utility cabinet, shall be chrome-plated over forged brass or zinc alloy.

Two (2) ceramic soap units with independent metal grab bars are to be included in the tub/shower area — one soap unit low for bathing, and the other high, for showering. Plated metal soap/grab-bar units are permitted.

10. Accessories: (Continued)

Integrally-moulded soap units with independent metal grab bars are acceptable for fiberglass tub/shower installations.

11. Doors:

Doors in typical baths shall be 2'-4" x 6'8" / 7'-0" x 1-3/8", warp-proof hollow or solid core, flush panel, paint grade with hardwood face veneers. Wider doors, where required by 'barrier-free' handicap codes, shall take precedence.

12. Bar/Lavatory Units:

Locations and quantities will be determined by Hilton. Generally, these units will be included in pivot (studio/double) rooms. See Plate IX for layout and dimensions.

13. Baths for Handicapped Guests:

See Plate XI for recommended layout, dimensions and accessories.

Digressions dictated by local code requirements shall take precedence, in which instance the architect must submit a copy of the applicable code excerpt and the proposed layouts and details to Hilton for review and approval, prior to incorporation in the working drawings and specifications.

The minimum number of handicapped baths shall be determined by local code requirements.

ARCHITECTURAL CRITERIA - GUEST ROOM CLOSETS

See Plates IX, X and XI

The configuration and position of closets in recently-constructed Hilton properties (adjacent to the baths and broadside to the corridors) has contributed, significantly, to appearance and 'invitation'. The unique entry foyer creates an aura of spaciousness and luxury commensurate with Hilton's unexcelled reputation in hotel keeping — a position that has been earned by attention to detail and services catering to diversified and exacting needs.

1. Minimum closet width for 'commercial' properties is 3' - 0" (3' - 6" preferred).
2. In lieu of the traditional closet depth of 2' - 0", a net clear inside depth of 2' - 4" is required to accommodate bulky garment bags.
3. The metal hangrod (chromium-plated or stainless steel) should be centered (1' - 2" center of rod to rear wall of closet).
4. 1" x 4" wood shelf cleats are to be installed on the three interior walls to provide adequate support for the closet shelf and to provide 'grounds' for the installation of individual clothes hooks at each end — a minimum of two clothes hooks per closet is required.
5. All closets shall have fully-mirrored 'bi-fold' (preferred) or fully-mirrored sliding doors with sill and head tracks (no side frames).
6. All rooms shall contain 'pull-out garment rods' (Garcy #D-3239 or Knappe & Vogt 753, or equal) mounted on the room side of the partition between the entry door and the closet doors. (See Elevation #3 on Plate IX). This retractable rod will facilitate the unpacking and packing of garment bags.
7. All closets shall have one trouser and skirt hanger unit (Knappe & Vogt #550, or equal).
8. Optional Items:
 - a) The closet width may be 'compartmented' by a vertical wood panel divider, so that one side of the closet may be fitted with dual hangrods to accommodate two rows of suits or skirts and blouses.
 - b) Shoe racks (Knappe & Vogt #721, single-tiered; #722, double-tiered). These racks are 21" wide and may be mounted on the sides of the closets, where they will be seen more readily.
 - c) Electric shoeshine units. Generally specified for suites or special accommodations. If used, electrical outlets in the closets will be required.
 - d) Tie rack (Knappe & Vogt #572, rotating; #773, four-arm swinging).
9. Supplementary Closet Space:

In resort locations, second closets may be added as shown on Plate X.

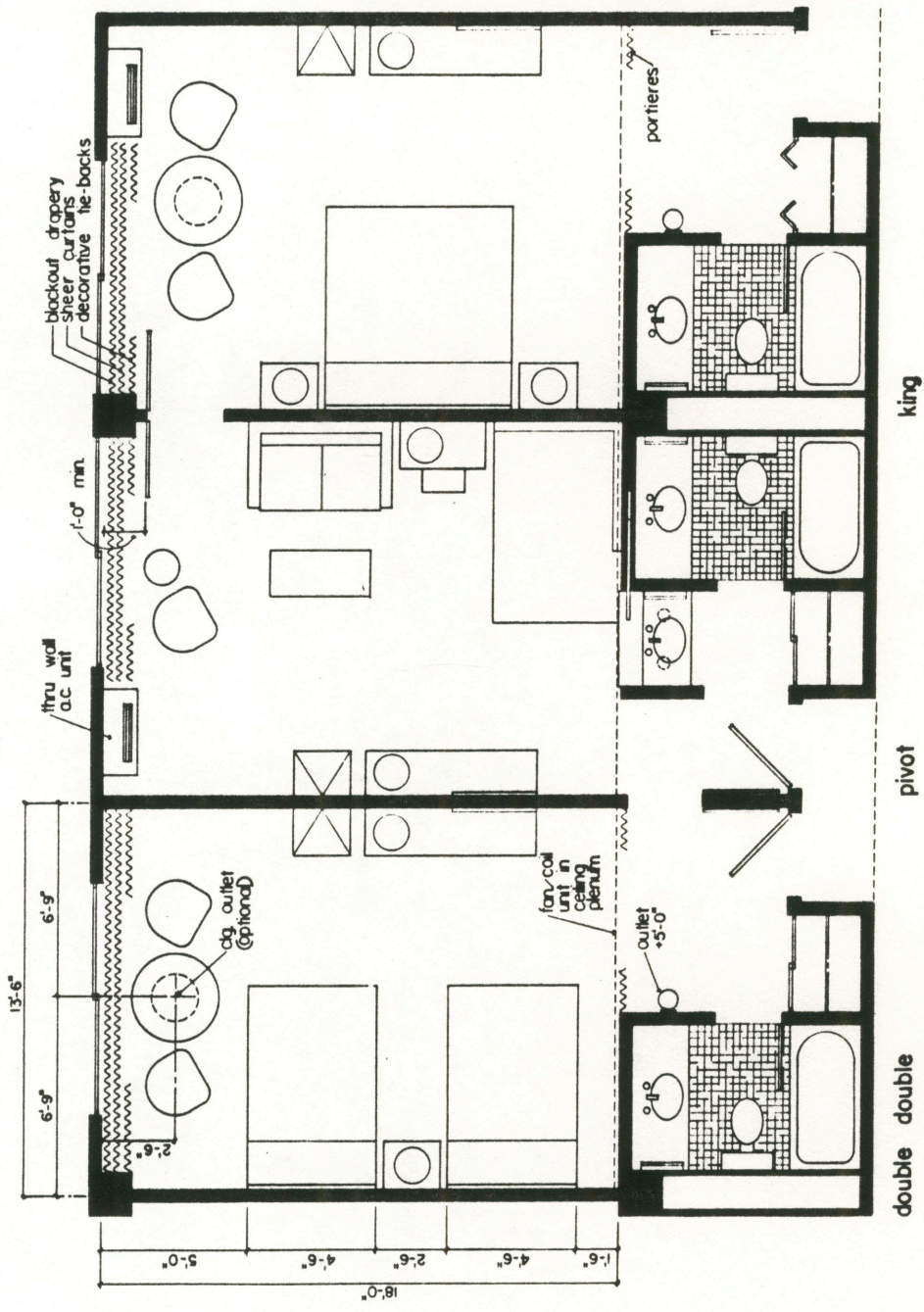
ARCHITECTURAL CRITERIA - CORRIDORS

See Plate XII

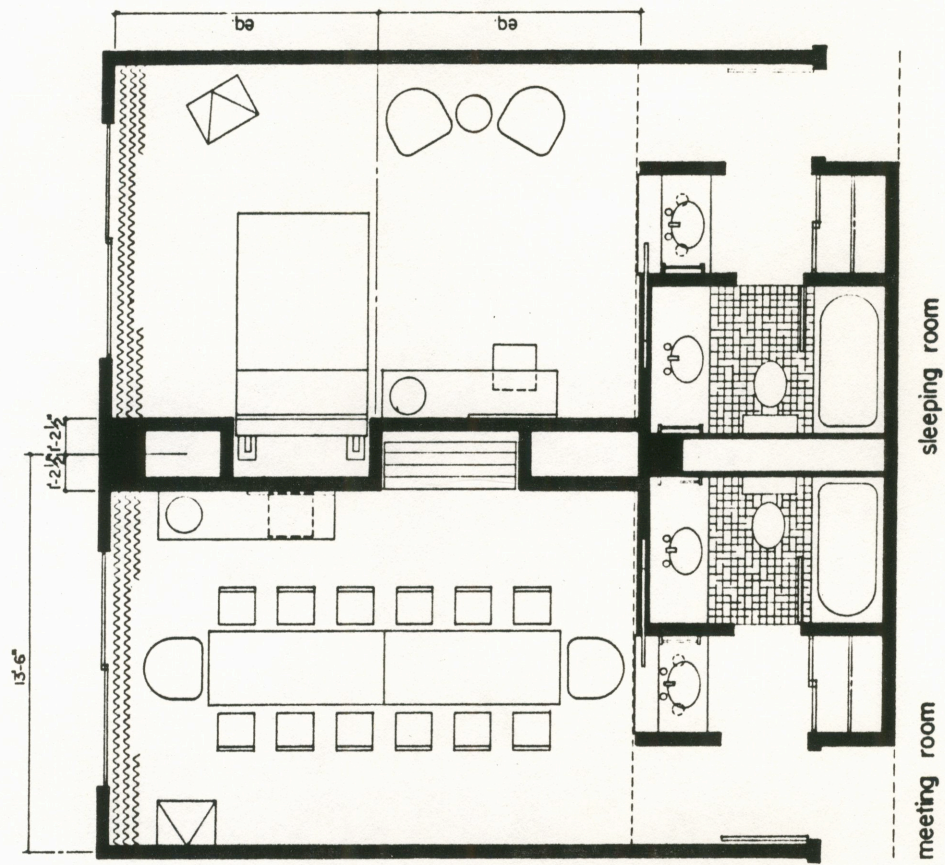
Corridors and elevator foyers are the 'public spaces' of the guest room buildings. Like hotel lobbies, restaurants, cocktail lounges, banquet rooms, etc., they must contain 'image factors' which are important in a well-designed property.

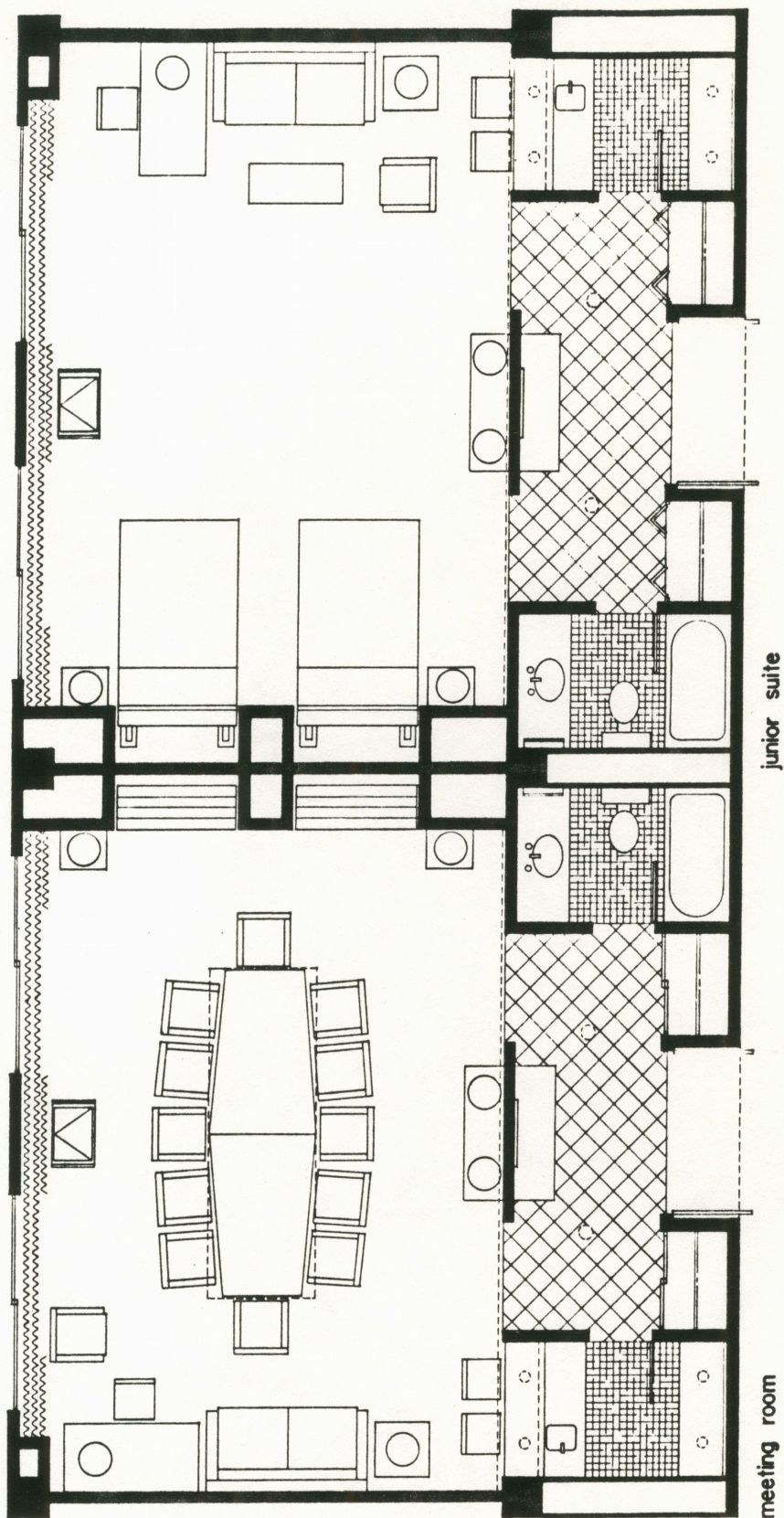
The corridor, in addition to providing the guest with a 'communication link' between his room and the public areas, also serves as work space for maids, porters and other maintenance personnel. The area, then, must be attractive as well as utilitarian and relatively maintenance-free.

1. Enclosed, all-weather, corridors are mandatory. Corridors exposed, entirely or in part, directly to the atmosphere are not permitted.
2. Corridors in 'double-loaded' buildings (rooms flanking a central corridor) must be 6' - 0" wide, exclusive of the indented room entrances.
3. Corridors 5' - 0" wide in 'single-loaded' guest room buildings (with indented entrances) are permitted but not recommended.
4. Ceiling heights at guest room entrances may be 7' - 0" minimum. The remaining portion of the corridors must have a minimum height of 7' - 6".
5. Acoustical tile, of any nature, or for any reason, is not permitted.
6. All wall surfaces must be covered with wall vinyl, floor to ceiling. Vinyl wallcovering will be selected and specified by Hilton, as part of the guest room design/decorating program.
7. All floor areas (other than equipment rooms, vending machine alcoves, etc.) are to be covered with carpet. Applied carpet bases, 4" high, are recommended. In lieu of extruded vinyl or wood cap mouldings, exposed edges of carpet should be coated with clear cement to avoid raveling.
8. Refer to plans (Plate XII) for recommended lighting schemes. The scheme at the center of the page (recessed fluorescent strip lights at indentations) is preferred.



standard room plans
 0 1 2 3
 scale feet



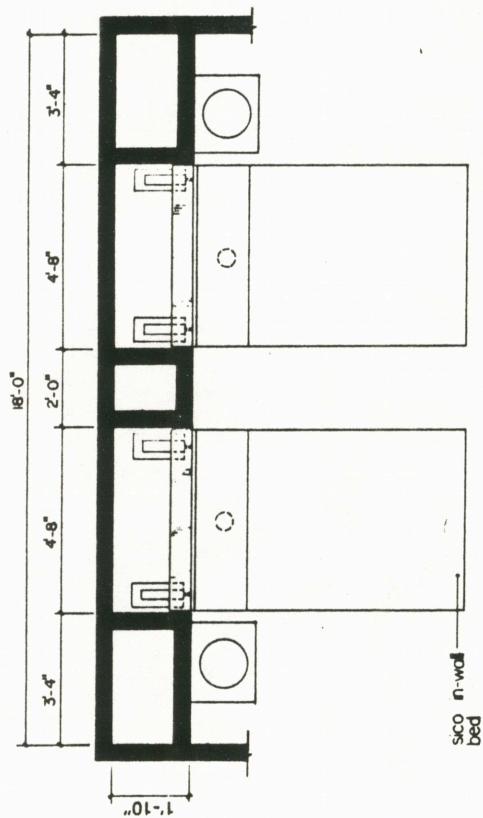


meeting room

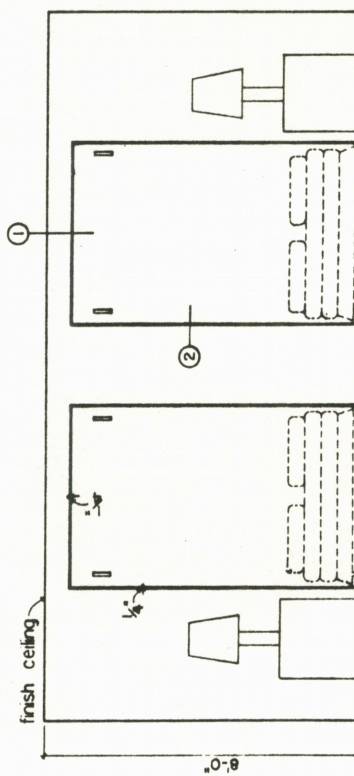
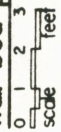
junior suite

multipurpose rooms

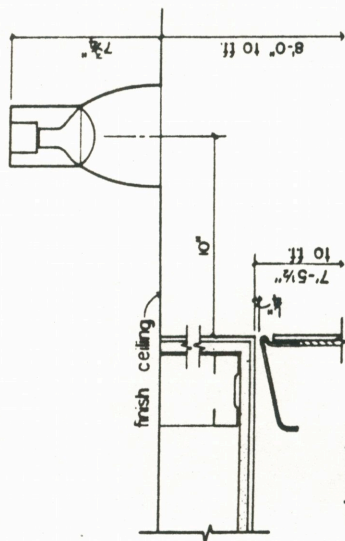
0 1 2 3
scale feet



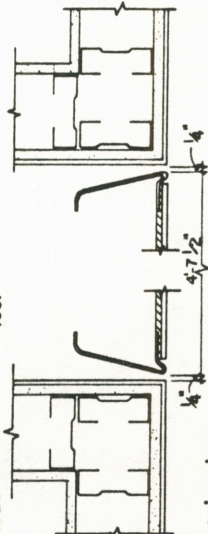
wall bed plan



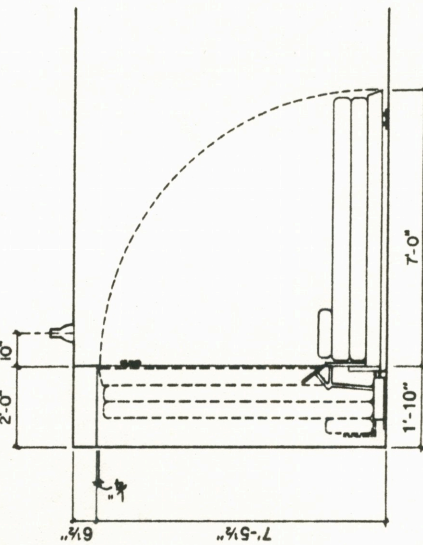
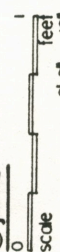
elevation



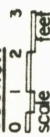
① head

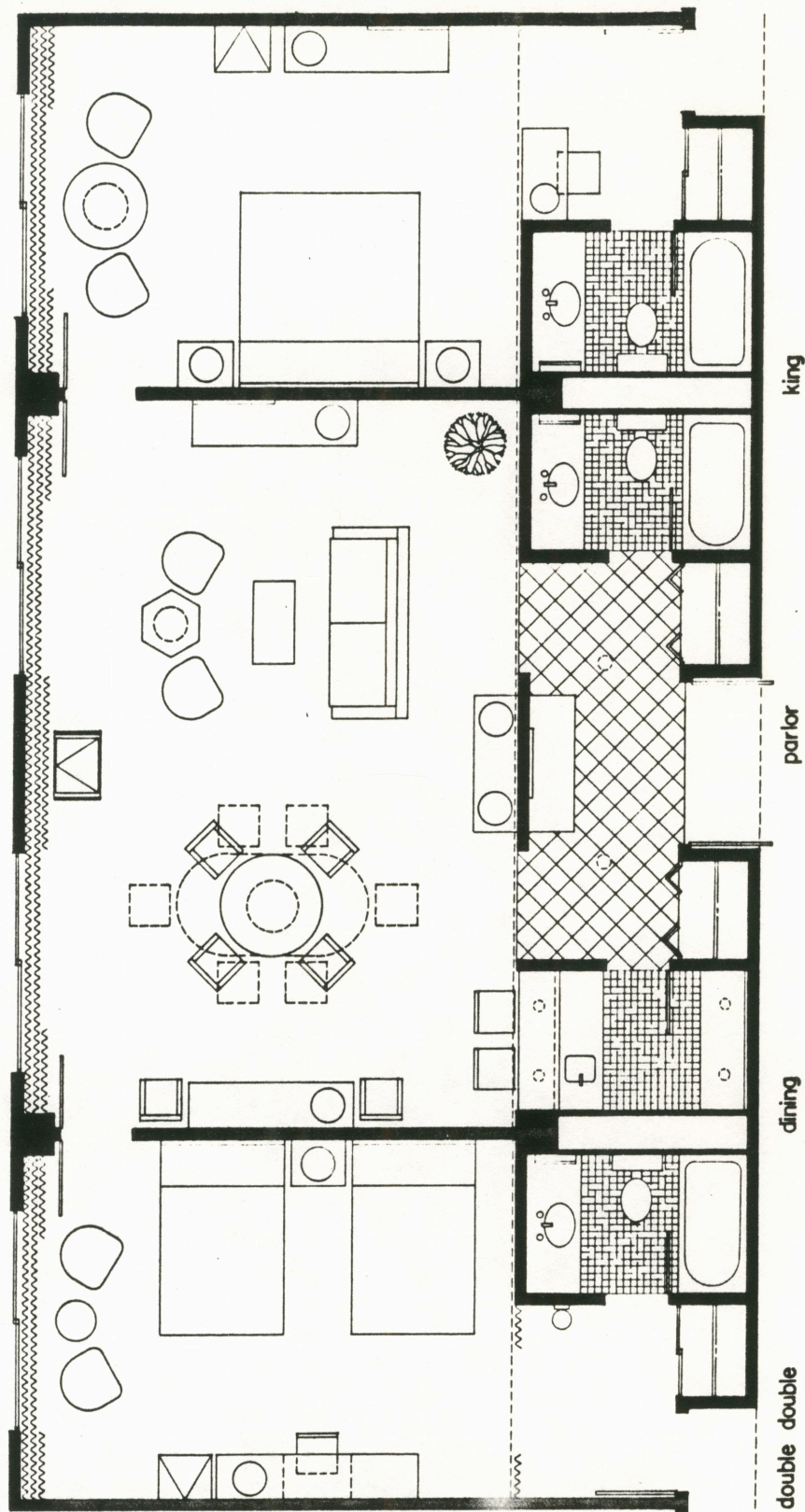


② jamb



section





double double

dining

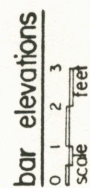
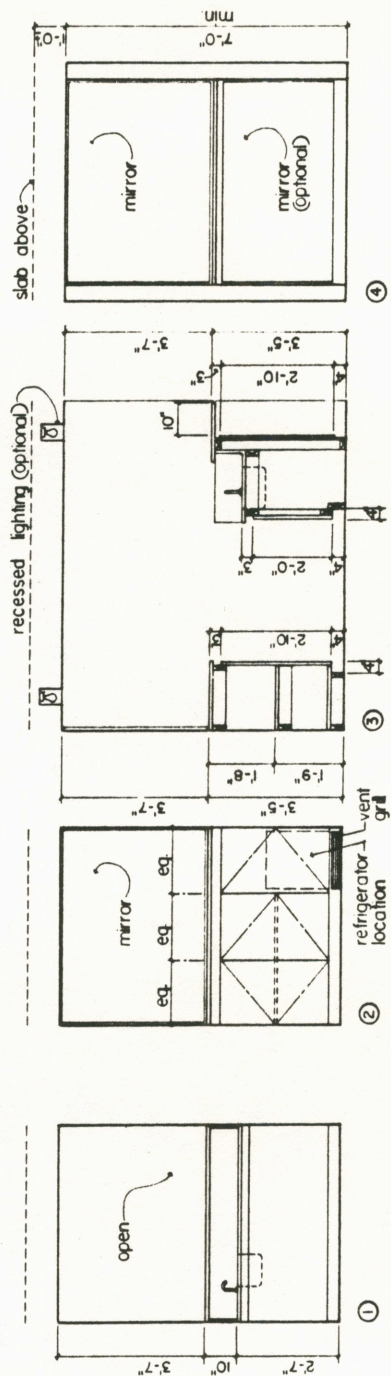
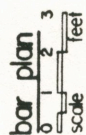
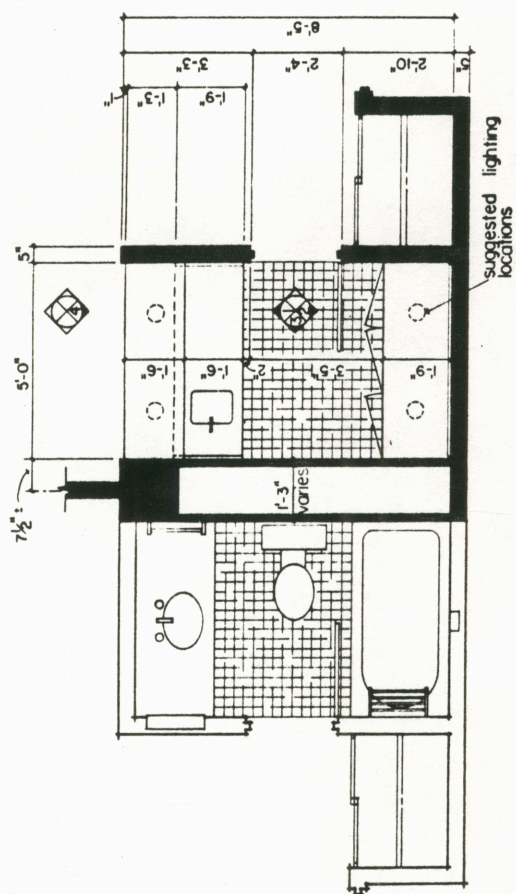
parlor

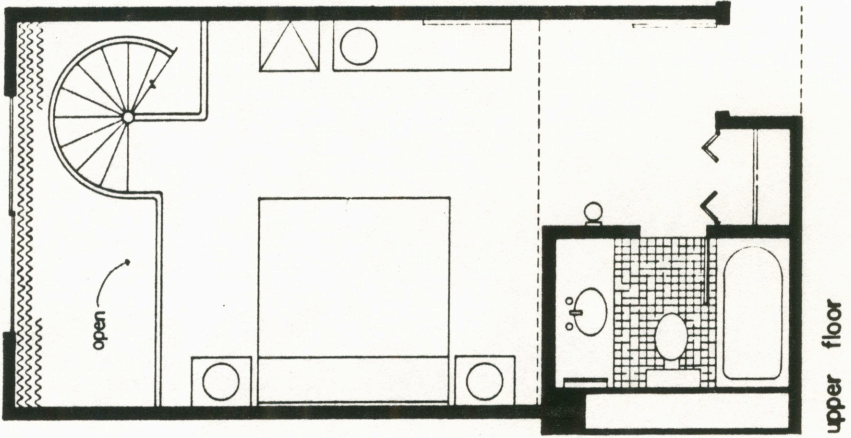
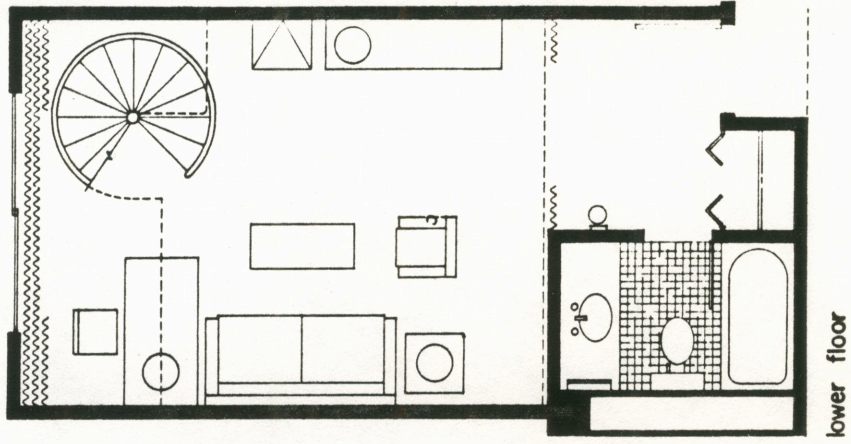
king

luxury suite

0 1 2 3
scale feet

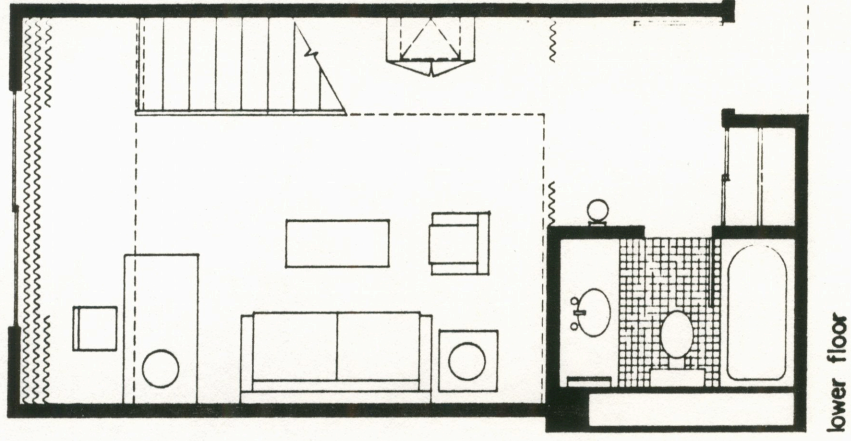
PLATE VI



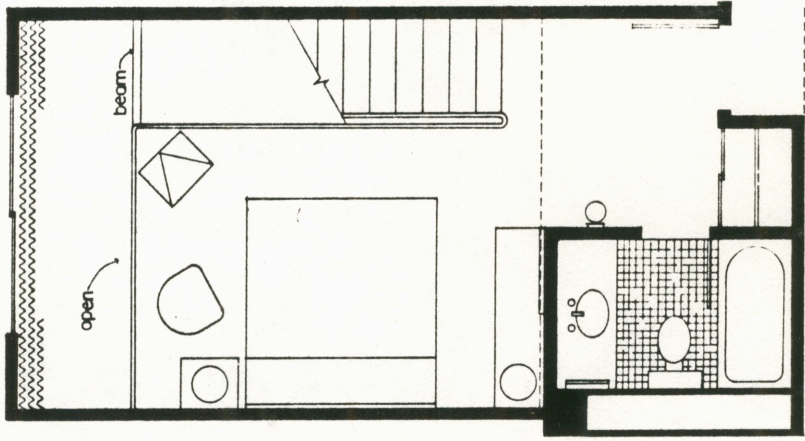


townhouse suite

0 1 2 3
scale feet

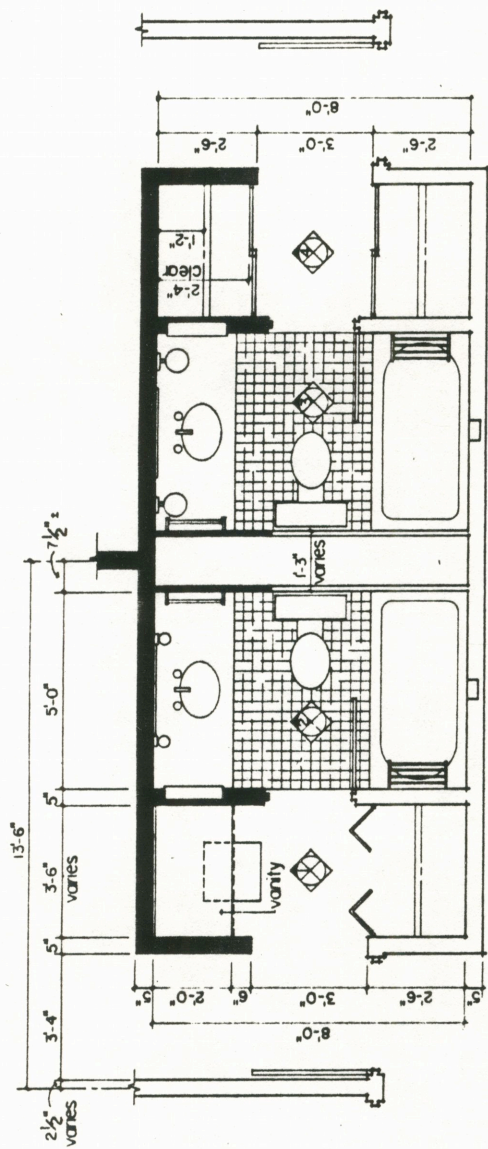


lower floor

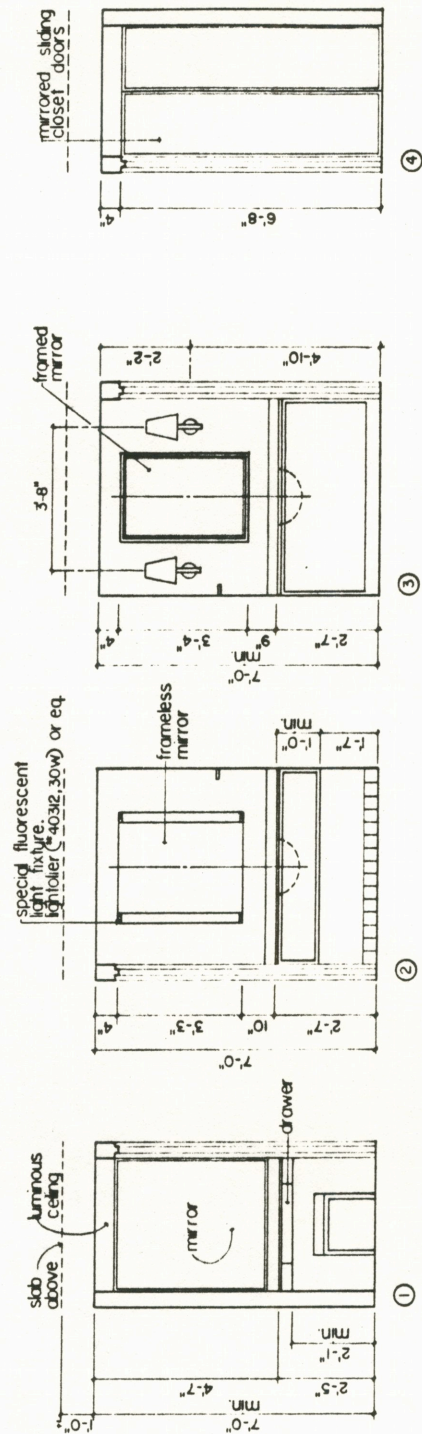
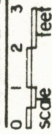


upper floor

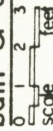
townhouse suite
0 1 2 3
scale feet

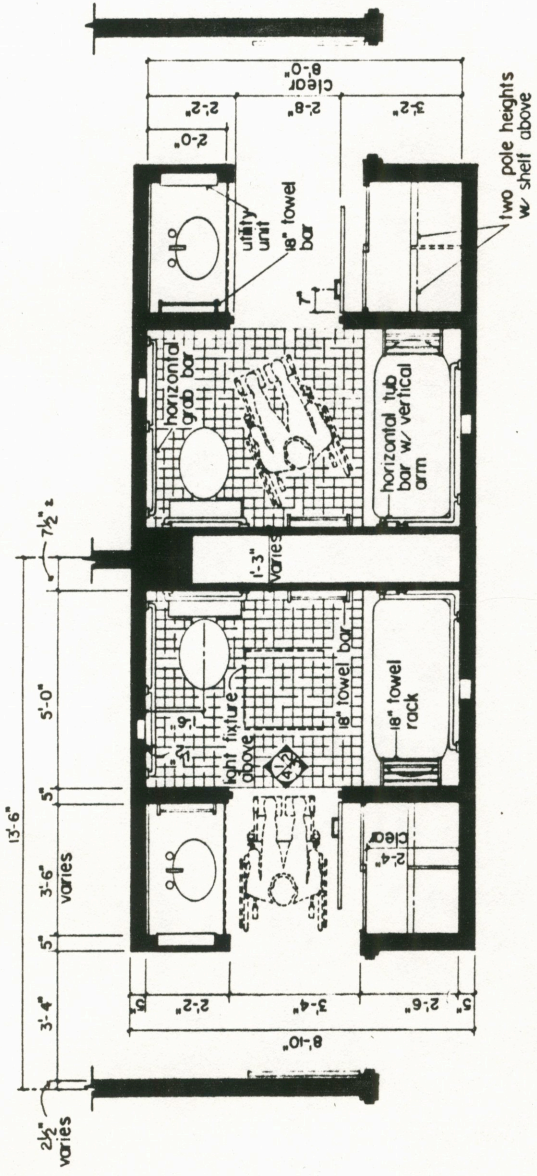


standard bathroom plan (alternate lighting schemes)

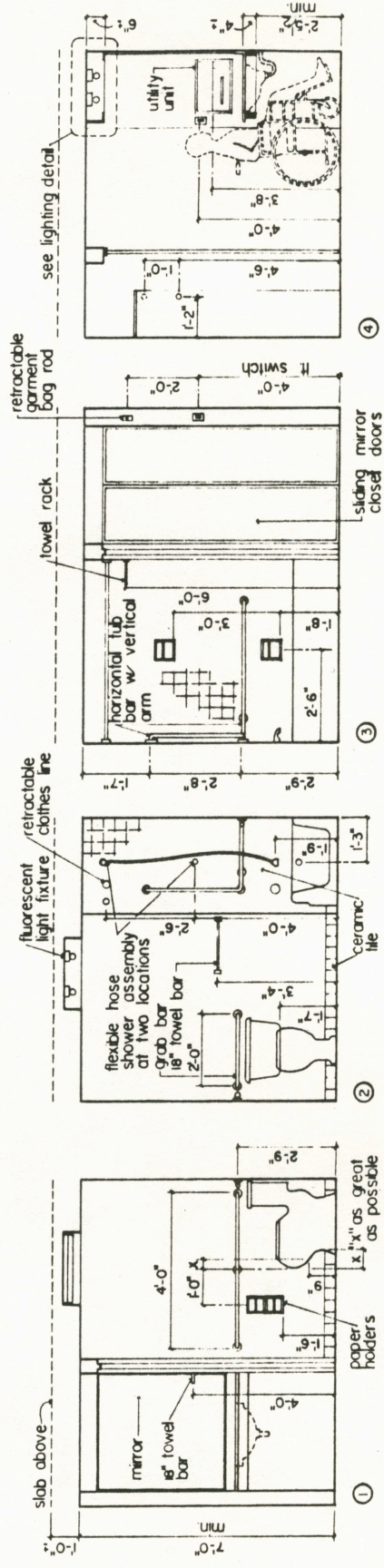
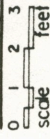


bath & dressing elevations



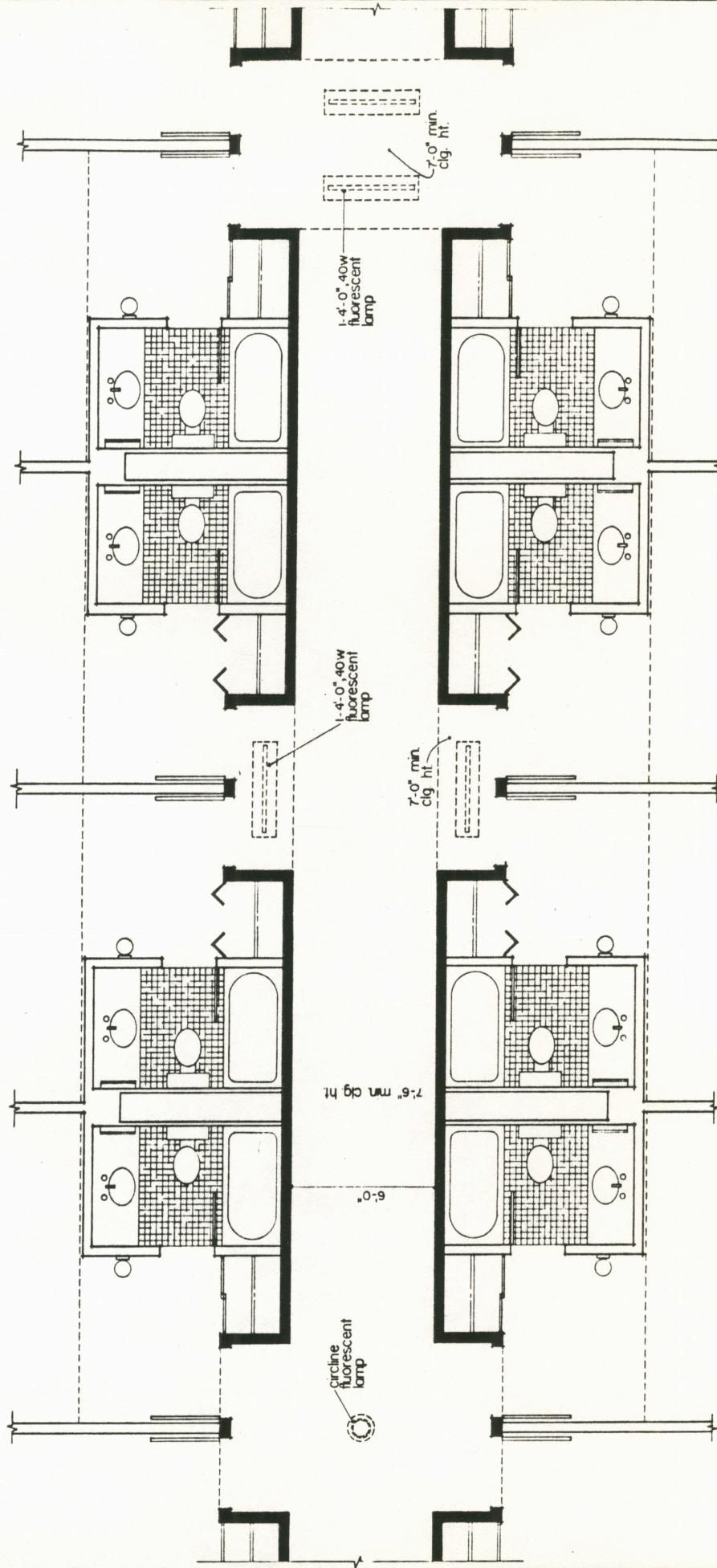


handicapped bathroom plan



bath & dressing elevations





corridor lighting plan
 0 1 2 3
 scale feet

APPENDIX C:
CLIMATE DATA & SOILS ANALYSES

AVERAGE TEMPERATURE

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	An. l.
1899	23.2	14.6	28.8	40.3	47.6	55.4	64.0	56.1	55.0	41.6	39.0	26.2	41.0
1900	30.4	23.9	39.2	48.0	52.4	61.6	63.4	58.4	51.9	43.6	27.8	31.2	44.3
1901	20.8	23.1	35.4	42.4	54.6	51.4	64.4	65.7	49.1	47.8	36.7	28.0	43.3
1902	22.0	27.2	34.5	41.2	51.6	54.4	59.8	61.5	50.8	46.2	32.4	24.8	42.2
1903	27.6	20.6	32.7	41.1	47.9	61.4	60.2	62.4	50.8	44.4	28.8	25.6	42.0
1904	27.5	25.6	29.4	45.8	51.6	56.2	65.2	64.3	55.6	45.3	38.8	30.4	44.6
1905	24.1	18.2	39.4	44.7	50.0	55.8	65.8	64.8	56.2	38.8	31.4	24.0	42.8
1906	26.2	28.2	29.8	47.3	51.0	55.4	69.0	63.7	56.0	47.2	31.8	27.2	44.4
1907	11.8	23.4	33.6	40.6	41.1	56.0	63.2	59.0	52.6	48.8	35.9	27.3	42.1
1908	24.4	26.2	33.6	45.4	49.1	56.2	66.2	61.9	55.7	43.4	34.6	25.1	43.5
1909	13.8	26.8	34.6	38.6	48.6	58.9	62.2	61.7	55.4	44.9	35.5	19.2	41.7
1910	22.5	18.2	41.0	47.8	54.8	59.5	66.6	59.1	52.4	47.0	34.9	29.5	44.4
1911	21.8	20.0	38.4	42.1	48.7	60.2	62.6	60.4	51.0	42.4	25.6	22.2	41.7
1912	20.0	28.0	28.0	45.8	52.7	61.4	60.5	59.8	48.4	41.4	35.6	27.2	42.4
1913	18.2	17.0	26.6	42.9	50.9	60.7	61.8	63.3	53.4	39.4	35.4	24.8	41.2
1914	29.2	22.3	35.4	44.8	53.0	57.3	66.7	63.1	52.6	43.2	36.4	19.0	43.6
1915	20.2	28.4	37.1	49.2	51.4	55.8	60.0	69.1	51.4	46.2	32.2	23.3	43.7
1916	4.4	24.4	35.4	43.5	47.1	55.3	62.7	61.6	53.0	40.5	28.0	14.9	39.2
1917	20.1	22.0	26.2	39.6	51.3	57.4	63.5	56.8	43.5	36.2	26.2	22.2	42.4
1918	21.8	21.7	36.1	42.6	48.3	62.2	64.7	60.1	56.8	47.0	32.8	28.1	43.5
1919	26.8	23.0	32.8	46.4	51.0	60.2	67.0	65.0	54.0	36.4	26.7	17.6	42.2
1920	24.2	25.9	31.2	39.2	48.0	58.6	69.6	63.6	54.2	42.4	32.6	27.9	42.9
1921	28.1	30.2	33.3	42.1	53.0	60.9	65.0	64.0	48.8	46.4	30.3	21.0	43.4
1922	16.9	15.4	29.9	40.1	50.4	63.8	64.6	65.8	57.8	47.6	30.0	18.3	41.7
1923	27.4	17.0	32.6	42.6	50.8	58.1	68.0	64.0	57.0	44.0	33.7	24.5	43.3
1924	17.9	33.0	34.1	42.9	55.4	56.5	65.6	61.2	53.8	44.7	31.1	14.7	42.6
1925	27.3	35.8	35.9	47.0	54.3	59.5	68.4	61.8	53.9	38.4	33.3	23.4	45.8
1926	24.6	34.0	38.6	47.2	51.9	60.6	68.6	62.4	46.3	46.2	34.9	23.4	44.9
1927	20.6	26.7	33.8	40.8	48.0	58.8	65.2	62.8	52.9	45.8	34.8	13.7	42.0
1928	23.3	24.6	36.8	40.5	56.6	56.6	65.6	60.8	55.2	43.2	34.4	22.0	43.3
1929	10.2	14.6	35.8	40.4	50.9	57.4	66.2	67.9	51.6	45.4	31.0	28.4	41.6
1930	5.4	32.4	34.0	49.4	51.3	57.5	67.5	68.0	56.9	41.4	29.6	24.4	43.2
1931	27.8	27.9	35.7	44.5	54.8	61.0	67.2	67.0	54.8	44.2	27.2	25.6	44.8
1932	19.7	25.7	28.6	44.2	52.6	61.2	65.8	65.2	54.8	42.2	37.4	20.8	43.2
1933	26.4	18.9	35.5	42.4	48.9	61.9	66.6	64.6	52.2	45.6	37.2	31.3	44.3
1934	33.4	32.8	39.8	51.4	57.2	59.2	67.0	66.0	51.2	46.2	39.0	27.6	47.6
1935	21.6	27.8	31.9	38.2	50.9	57.5	65.2	62.2	57.5	43.0	28.0	28.8	42.7
1936	25.0	6.2	32.6	44.7	58.9	61.4	70.8	66.5	54.3	45.2	25.1	26.6	43.1
1937	1.0	21.8	33.8	42.4	53.2	58.9	68.0	62.0	58.1	47.4	35.4	27.2	42.4
1938	25.2	34.4	34.4	45.4	51.5	61.4	68.0	64.4	46.0	30.4	27.5	45.0	
1939	30.2	21.2	35.0	46.6	54.7	54.8	67.3	66.0	56.2	46.4	35.4	31.4	45.4
1940	20.4	30.2	40.2	45.0	56.0	63.0	68.2	66.7	60.8	48.4	25.3	29.1	46.1
1941	24.4	28.8	39.8	47.5	53.4	60.8	69.3	64.4	50.5	43.2	36.2	28.5	45.7
1942	17.4	22.7	35.2	45.8	50.4	54.8	65.6	64.6	56.0	45.5	29.6	28.2	43.0
1943	12.9	26.4	25.3	47.8	48.8	54.0	64.8	63.6	56.6	46.2	33.5	25.7	42.1
1944	25.8	27.4	30.8	45.3	53.7	59.0	65.7	62.2	56.5	49.2	33.4	23.6	44.4
1945	29.2	30.0	33.9	39.6	52.1	58.0	67.0	66.4	52.0	46.8	32.6	21.4	44.4
1946	27.1	29.9	38.4	45.4	52.0	58.8	67.0	64.2	53.8	39.4	27.5	24.0	43.9
1947	21.4	27.0	34.6	45.6	55.0	55.6	67.8	62.4	54.4	47.1	31.2	27.0	44.1
1948	25.2	24.2	28.6	42.0	52.6	61.8	67.8	62.3	54.8	43.1	33.0	19.4	42.4
1949	6.6	19.8	31.0	47.0	55.6	57.4	63.8	65.2	55.0	40.0	38.2	24.2	42.0

TOTAL PRECIPITATION

KALISPELL
MONTANA 1949

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1899	3.35	1.30	0.25	0.78	2.11	1.94	1.10	2.08	2.75	1.13	0.96	1.75	19.50
1900	0.84	0.99	0.56	1.33	3.90	1.40	0.75	1.48	3.02	0.76	1.87	0.88	17.69
1901	1.26	0.84	0.98	0.45	1.95	2.86	0.34	1.14	1.81	0.43	0.73	1.06	12.85
1902	0.77	1.67	0.46	0.59	4.50	1.51	2.65	0.95	0.76	0.16	2.95	2.24	19.21
1903	0.91	0.48	0.53	0.95	1.07	1.61	1.70	0.78	1.49	1.11	3.13	0.87	14.63
1904	1.12	1.90	1.94	0.70	0.79	0.60	0.78	1.15	0.40	0.43	0.26	0.82	10.89
1905	1.33	1.21	0.76	0.73	2.73	2.72	0.56	0.11	1.21	1.81	1.54	0.49	15.20
1906	1.14	0.41	0.72	0.46	2.68	1.03	0.22	1.98	0.23	0.75	1.79	2.09	13.50
1907	2.01	1.51	1.16	0.87	1.06	3.01	1.14	2.54	2.12	T	0.50	1.02	16.94
1908	1.70	0.81	1.92	0.71	4.21	2.48	1.44	0.88	2.01	1.53	0.35	0.47	18.51
1909	1.80	1.11	0.72	0.83	1.47	3.05	3.07	0.11	1.21	0.43	2.99	1.01	17.80
1910	0.78	2.06	1.45	0.86	1.87	0.40	0.43	0.67	2.31	1.29	1.68	0.52	14.12
1911	0.49	0.48	0.51	0.58	0.96	3.83	0.78	1.44	2.75	0.84	2.49	0.95	16.10
1912	1.69	0.48	0.37	0.61	0.76	2.59	1.56	1.03	0.68	0.41	0.83	0.69	11.70
1913	2.69	0.33	1.73	0.86	0.92	3.21	0.38	0.61	0.31	1.29	1.16	0.48	13.97
1914	1.31	1.68	1.17	1.21	0.60	2.51	0.69	1.31	1.21	3.40	1.58	0.40	17.07
1915	1.19	1.01	0.59	1.16	3.68	2.09	2.74	0.22	2.04	0.34	1.69	2.00	18.75
1916	1.95	1.06	2.43	0.73	1.11	3.91	1.76	1.96	1.63	0.62	0.80	1.70	19.66
1917	1.05	1.82	1.09	1.26	0.97	2.76	0.09	0.32	0.83	0.54	0.51	4.78	16.02
1918	1.82	0.90	0.76	0.63	0.43	0.58	1.47	0.96	1.59	0.91	0.23	0.87	11.15
1919	0.72	1.69	0.45	0.24	1.72	0.55	0.88	1.06	3.50	1.05	1.35	0.91	11.12
1920	0.85	0.26	0.92	1.48	1.15	0.95	0.98	2.61	0.70	1.25	0.43	1.23	12.81
1921	1.29	0.66	1.55	1.17	0.57	1.22	0.62	0.58	0.79	1.15	2.39	1.16	13.13
1922	0.74	0.60	0.77	1.86	0.76	0.54	0.81	0.76	0.52	1.05	1.06	1.50	10.97
1923	1.07	0.94	0.42	0.41	2.88	1.49	1.60	0.96	0.23	0.55	0.89	1.55	12.99
1924	0.91	0.51	0.74	0.01	0.39	3.24	0.97	0.74	0.90	0.32	1.61	2.49	12.83
1925	0.88	0.38	1.13	0.87	0.96	2.07	0.58	1.12	2.43	0.69	0.47	0.98	12.56
1926	1.15	0.63	0.20	0.21	1.23	1.20	0.20	2.23	2.14	0.67	2.01	1.48	13.35
1927	1.31	1.04	0.69	0.41	1.54	1.72	0.77	0.92	2.76	3.17	2.59	1.69	18.61
1928	1.15	0.14	0.74	1.80	0.61	2.51	1.49	1.14	0.04	0.82	0.50	1.00	11.94
1929	1.97	1.02	0.63	0.64	0.69	0.95	0.31	0.14	0.51	0.51	0.17	2.85	10.39
1930	0.80	0.62	0.35	1.32	1.87	2.52	1.02	0.23	2.67	1.61	2.49	0.35	15.85
1931	0.55	0.27	0.93	0.25	0.52	1.46	0.70	0.01	2.89	0.44	2.57	1.72	12.31
1932	1.18	0.65	1.75	1.06	1.96	0.50	0.68	1.85	0.15	1.35	1.34	0.96	13.43
1933	1.10	1.25	0.21	1.43	2.51	1.37	0.21	1.77	1.04	2.70	1.31	3.22	18.12
1934	0.88	0.06	2.72	0.68	1.22	2.96	0.27	0.07	0.71	2.26	0.97	0.94	13.74
1935	1.97	0.25	1.18	1.81	1.04	1.03	1.11	0.37	0.14	0.53	1.02	1.02	11.47
1936	1.93	2.10	1.50	1.33	0.40	1.73	0.45	0.47	1.04	1.00	0.42	1.68	14.05
1937	2.12	1.03	0.44	1.22	1.00	2.25	0.83	0.66	0.91	0.87	1.24	1.23	13.80
1938	2.11	1.07	0.94	0.37	1.72	1.17	1.06	0.56	1.14	0.80	1.27	1.13	11.94
1939	1.27	0.93	0.84	0.56	1.09	3.80	0.38	0.21	0.96	0.22	0.59	0.94	11.79
1940	0.58	2.13	1.10	1.49	1.08	0.83	2.26	0.02	1.69	1.05	2.02	0.81	15.06
1941	1.26	0.50	0.54	0.55	1.75	1.51	1.07	0.80	2.00	0.82	1.68	1.05	13.53
1942	0.79	1.48	0.49	1.43	3.92	4.13	2.72	0.90	0.31	0.74	2.39	1.51	20.81
1943	3.40	0.76	0.90	1.13	1.16	3.33	0.45	0.42	0.23	1.28	0.83	0.28	14.17
1944	0.27	0.51	0.84	0.97	1.48	1.46	0.60	1.34	0.75	0.10	1.47	0.63	10.42
1945	1.19	0.67	1.37	1.21	2.20	2.82	0.31	0.82	1.57	1.77	0.91	2.12	15.96
1946	1.07	0.73	0.55	0.51	1.40	1.81	0.97	0.77	1.30	3.18	1.99	1.82	16.10
1947	1.00	0.90	0.90	0.65	1.79	4.56	0.47	3.28	0.99	2.16	1.22	0.81	18.73
1948	0.86	1.27	1.24	1.92	4.36	2.76	3.15	2.33	0.10	0.40	1.50	1.02	20.91
1949	1.07	1.28	1.30	0.58	1.54	1.13	1.52	0.58	0.95	1.33	1.54	1.06	13.88

METEOROLOGICAL DATA FOR THE CURRENT YEAR

STATION
NOVEMBER 1950

Month	Temperature						Degree days	Precipitation						Relative humidity				Wind				Number of days														
	Averages			Extremes				Snow, Sleet, Hail						Fastest mile				Fastest mile																		
	Daily maximum	Daily minimum	Monthly	Highest	Lowest	Date		Total	Greatest in 24 hrs.	Date	Total	Greatest in 24 hrs.	Date	5:30 a.m.	11:30 a.m.	5:30 p.m.	11:30 p.m.	Average hourly speed	Prevailing direction	Speed	Direction															
	Daily maximum	Daily minimum	Monthly	Highest	Lowest	Date		Total	Greatest in 24 hrs.	Date	Total	Greatest in 24 hrs.	Date	5:30 a.m.	11:30 a.m.	5:30 p.m.	11:30 p.m.	Average hourly speed	Prevailing direction	Speed	Direction															
J	15.2	-2.0	6.6	48	-24	20	1813	1.07	0.21	7-8	21.4	6.5	8	70	66	63	70	4.9	W	26	SW	7	41	6.5	6	9	16	17	7	0	0	0	28	21	18	
F	28.4	11.3	19.8	48	23	-13	13	1262	1.28	0.26	16-17	14.6	4.3	18-20	79	72	69	76	5.0	W	25	N	11	34	7.4	5	5	18	17	5	0	0	0	18	28	28
M	39.6	22.3	31.0	49	21	1	1056	1.30	0.55	7-8	18.0	7.5	7-8	80	84	86	74	5.3	W	19	N	25	8	44	6.9	8	4	19	15	6	0	0	0	0	10	10
A	59.1	34.9	47.0	75	27	26	1	541	0.58	0.26	12-13	T	T	74	50	39	61	6.8	SW	28	SW	23	58	6.5	4	14	12	7	0	0	0	0	0	0	0	0
M	69.1	42.2	55.6	86	12	30	1	284	1.34	0.46	30	T	T	48	48	48	48	8.4	W	35	SW	28	58	6.5	4	14	12	7	0	0	0	0	0	0	0	0
J	71.8	43.1	57.4	86	10	35	18	229	1.13	0.49	1-2	T	T	42	42	42	42	10.9	SW	37	W	16	4	6.4	3	18	9	11	0	0	0	0	0	0	0	0
J	79.9	47.6	63.8	93	31	35	1	95	1.52	0.36	23-24	T	T	44	40	40	40	9.9	W	40	W	4	4	4.6	10	13	8	7	0	0	0	0	0	0	0	0
A	83.1	47.4	65.2	94	6	33	14	68	0.58	0.30	23	0	0	40	40	40	40	9.2	W	35	W	17	4	3.9	16	8	6	5	0	0	0	0	0	0	0	0
S	71.0	39.1	55.0	87	1	25	10	300	0.96	0.59	10	T	T	46	46	46	46	10.2	W	40	W	10	4	5.9	11	7	12	5	0	0	0	0	0	0	0	0
O	50.8	29.3	40.0	59	2	19	21	775	1.33	0.47	28	T	T	61	51	51	51	9.5	SW	45	W	18	8	8.0	5	3	23	8	0	1	4	0	1	34	8	8
N	45.4	31.0	38.2	60	1	20	21	804	1.54	0.37	13	3.5	3.0	30	76	76	76	7.0	SW	45	W	27	7	7.8	5	4	21	13	1	0	13	0	1	34	8	8
D	31.5	16.8	24.2	50	29	-1	21	1264	1.06	0.25	23-24	17.6	2.7	23-24	79	79	79	10.4	SW	50	SW	2	2	8.9	0	6	25	17	8	0	2	0	15	29	0	
Year	53.7	30.2	42.0	94	-24	Jan. 20	8501	13.86	0.59	Sept. 10	75.1	7.5	7-8	57	124	124	124	8.1	SW	50	SW	Dec. 2	6.6	84	95	186	131	27	25	22	13	71	179	18		

MEANS AND EXTREMES FOR PERIOD OF RECORD

Month	Temperature						Mean degree days	Precipitation												Relative humidity				Wind				Mean number of days																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	Means			Extremes				Snow, Sleet, Hail						Fastest mile		Fastest mile																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	Daily maximum	Daily minimum	Monthly	Record highest	Record lowest	Year		Total	Greatest in 24 hrs.	Year	Total	Greatest in 24 hrs.	Year	5:30 a.m.	11:30 a.m.	5:30 p.m.	11:30 p.m.	Average hourly speed	Prevailing direction	Speed	Direction																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	Daily maximum	Daily minimum	Monthly	Highest	Lowest	Year		Total	Greatest in 24 hrs.	Year	Total	Greatest in 24 hrs.	Year	5:30 a.m.	11:30 a.m.	5:30 p.m.	11:30 p.m.	Average hourly speed	Prevailing direction	Speed	Direction																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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(a) Length of record, years.
* Also NW on the 20th.

MONTHLY AND SEASONAL DEGREE DAYS

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
1899-1900	86	276	300	726	778	1200	1070	1150	798	511	389	148	7432
1900-01	112	218	393	666	1114	1048	1372	1173	916	680	328	409	8429
1901-02	72	38	479	532	848	1148	1332	1060	946	714	420	319	7908
1902-03	186	128	426	582	979	1246	1157	1244	1002	718	532	120	8320
1903-04	171	107	425	636	1088	1222	1162	1142	1104	576	416	270	8319
1904-05	67	83	280	611	786	1072	1267	1310	792	608	466	278	7820
1905-06	56	80	263	813	1010	1270	1201	1032	1090	531	434	290	8070
1906-07	4	87	277	535	996	1174	1650	1109	973	730	414	272	8239
1907-08	84	204	372	500	874	1169	1261	1128	972	590	493	265	7912
1908-09	60	142	279	671	910	1236	1588	1068	940	792	506	193	8385
1909-10	130	117	290	623	884	1422	1318	1312	742	515	319	178	7850
1910-11	28	196	384	558	902	1100	1338	1120	824	688	504	170	7812
1911-12	114	159	425	702	1182	1325	1396	1074	1147	578	382	150	8634
1912-13	154	172	500	730	882	1170	1452	1344	1191	663	437	149	8844
1913-14	146	108	349	794	888	1248	1110	1196	917	608	370	248	7982
1914-15	32	114	372	674	856	1424	1387	1025	866	474	423	277	7924
1915-16	166	2	408	583	982	1292	1876	1178	920	644	555	304	8910
1916-17	106	118	370	759	1108	1553	1390	1205	1202	762	428	291	9290
1917-18	30	86	244	666	864	1202	1337	1212	895	672	519	142	7869
1918-19	97	174	246	559	966	1144	1185	1174	998	556	442	194	7735
1919-20	38	58	331	886	1148	1468	1256	1134	1049	778	526	286	8964
1920-21	18	120	322	700	973	1150	1206	914	982	686	371	136	7638
1921-22	64	70	488	576	1041	1363	1492	1388	1088	747	454	74	8845
1922-23	56	56	218	539	1048	1448	1168	1342	1003	672	442	220	8212
1923-24	36	74	240	650	938	1255	1460	930	959	664	298	258	7762
1924-25	76	142	340	630	1017	1560	1169	816	903	542	332	210	7737
1925-26	12	143	337	825	952	982	1252	870	820	532	406	180	7311
1926-27	29	110	561	581	903	1288	1376	074	968	724	528	188	8330
1927-28	62	93	364	598	907	1590	1293	1170	874	736	272	262	8221
1928-29	78	158	300	676	920	1332	1699	1412	907	737	438	232	8899

SOILS:

General surface soils classification for the area is Radnor Silt Loam with 0-3% slopes, Class Vw-1 (Soil Conservation Service Classifications). This series consists of moderately deep, poorly drained soils in depressed areas that have poor drainage.

The parent material is medium and moderately fine textured glacial lake and stream sediments, derived in a large part from argillite, quartzite, and dolomitic limestone, all of the Belt Geological Formation. The soils have developed undercourse marsh grasses, sedges, rushes, and sparse to heavy stands of spruce, fir, willow, and cottonwood.

The soils have a muck or peatlike surface layer, 2 to 8 inches thick, and a gray, clayey surface soil, 4 to 8 inches thick. The subsoil is gray silty clay loam that is mottled and stained with brown and yellow. The material below is nearly white and is variable in texture. The water table is generally within 2 or 3 feet of the surface. Most are flooded part of the time. Some remain wet to the surface throughout the year. [Source: SCS]

On a very generalized basis, the soils existant on this site present the potential for severe constraints for use as residential building sites (due to possible flooding, seasonal high water table); severe constraints can also be anticipated for roads and parking (due to possible flooding, high water table, frost heave potential, and unfavorable load bearing capacity); severe constraints will also be possible for lawns and landscaping, intensive play areas, or for picnicking and camping (due to flooding or ponding potential, seasonal high water table, high organic matter content). [Source: SCS]

Soils at depth can be characterized by clay and mud, 0-90', silt and sand 90-120', grey hardpan 120-140', and water bearing sand and gravel 140-144'.

WATER TABLE, GROUNDWATER, etc.:

The water table for this area is very high, and appears to be keyed to the snowmelt and runoff in the spring, as well as to the actual fluctuation in the level of Whitefish Lake. An April 1982 study done by Thomas, Dean, and Hoskins (engineers), and observations done by Paul Wells (engineer for the Viking Project) indicate ground water in the spring rises to within 12" of the surface. Late summer may indicate ground water has dropped to 5-8'. An October 1976 soils investigation by Northern Testing Laboratories states "...groundwater was at a depth of 10.6' to 15' at the time of our investigation and is expected to rise seasonally." All the above referenced test data was derived from test holes dug or drilled on the property adjacent on the East of the Trojan Properties.

The Viking well indicates a water depth of only two feet below ground surface. This would suggest an inherent hydrostatic head forcing deep groundwaters upward toward the surface.

The area to the East (Reich and Viking properties) is profuse with surface runoff drainages, including a year round stream. Due to blockage of many of the otherwise effective drainage channels by fallen trees, limbs, and other debris, seasonal ponding does occur, which may adversely affect the subject property by lengthening the time period that the ground is at a point of saturation due to seasonal runoff. The Viking Redevelopment Proposal does address channeling, etc. to expedite drainage and streamflows, allowing the surface to dry out faster in the spring, thus alleviating the problem.

ACCESS:

The Trojan Properties are located adjacent to Wisconsin Avenue, which is a State Secondary Highway (FAS 487). This highway serves as the arterial accessing both Whitefish Lake and Big Mountain Ski Area. Traffic counts indicate Hwy 487 is the most heavily used Secondary Highway in Flathead County. U.S. Hwy 93 is located 1½ miles to the South in the center of the Whitefish Business District. The Big Mountain Road intersects with Hwy 487 just over a mile to the North, leading to the Big Mountain Ski Area which is located approximately five miles up the mountainside.

ARCHITECTURAL SOLUTION

MONTANA STATE UNIVERSITY LIBRARIES



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DATE DUE

New Book

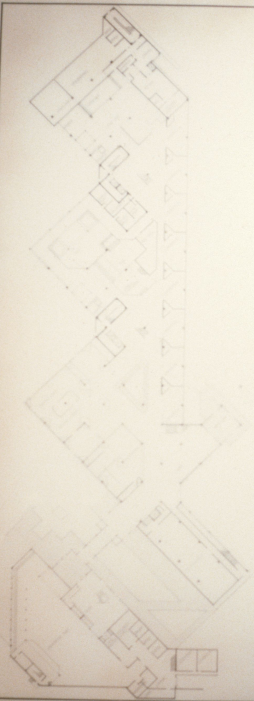
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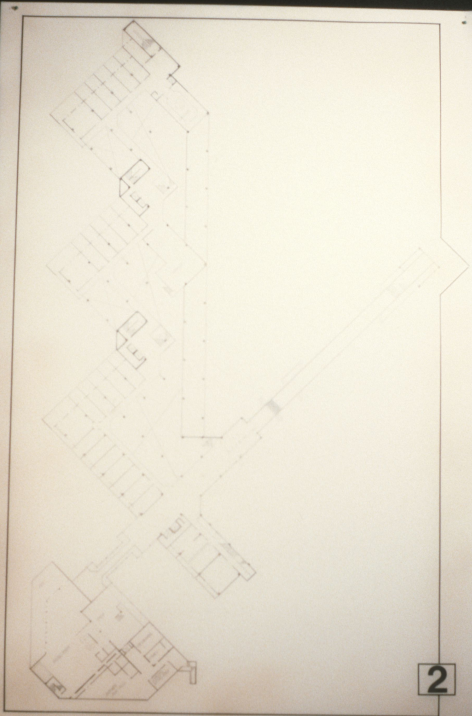
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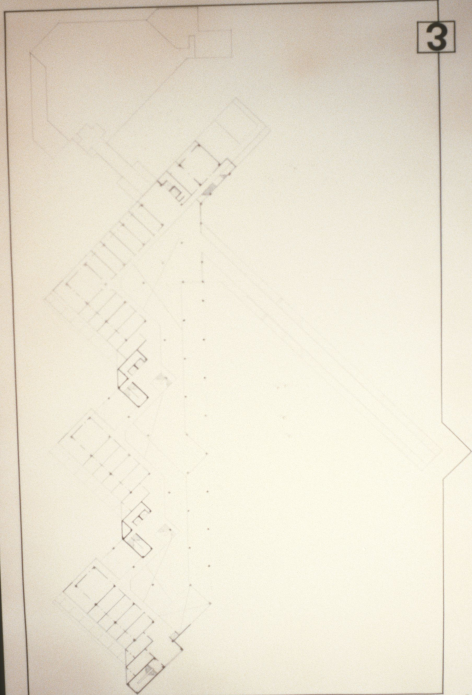
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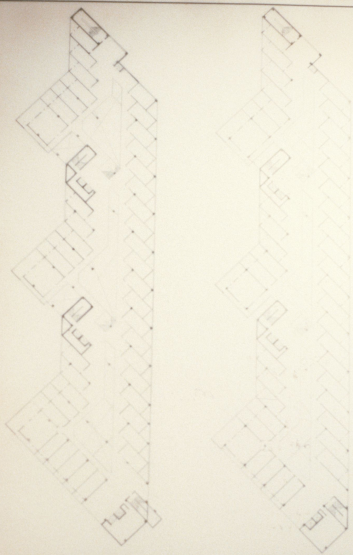


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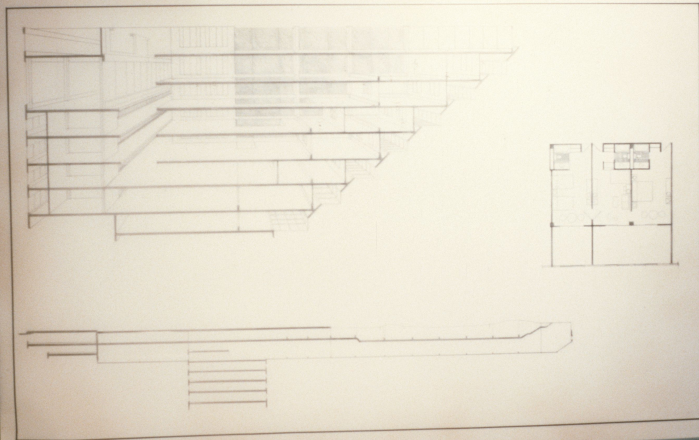


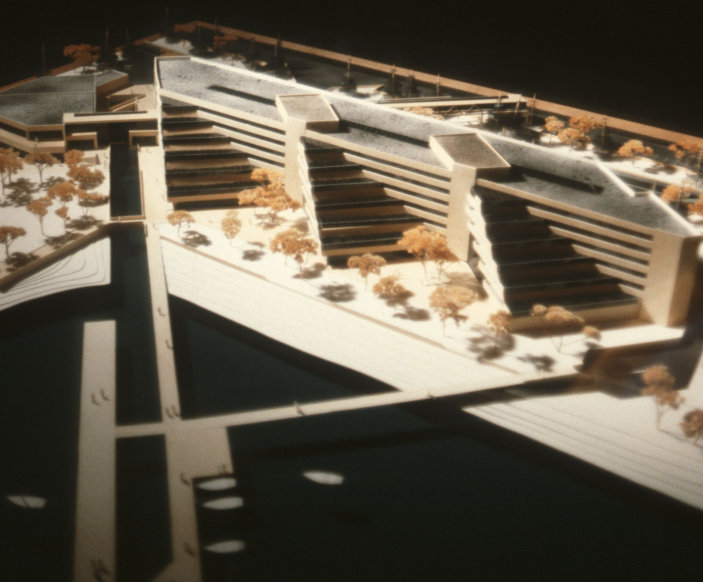
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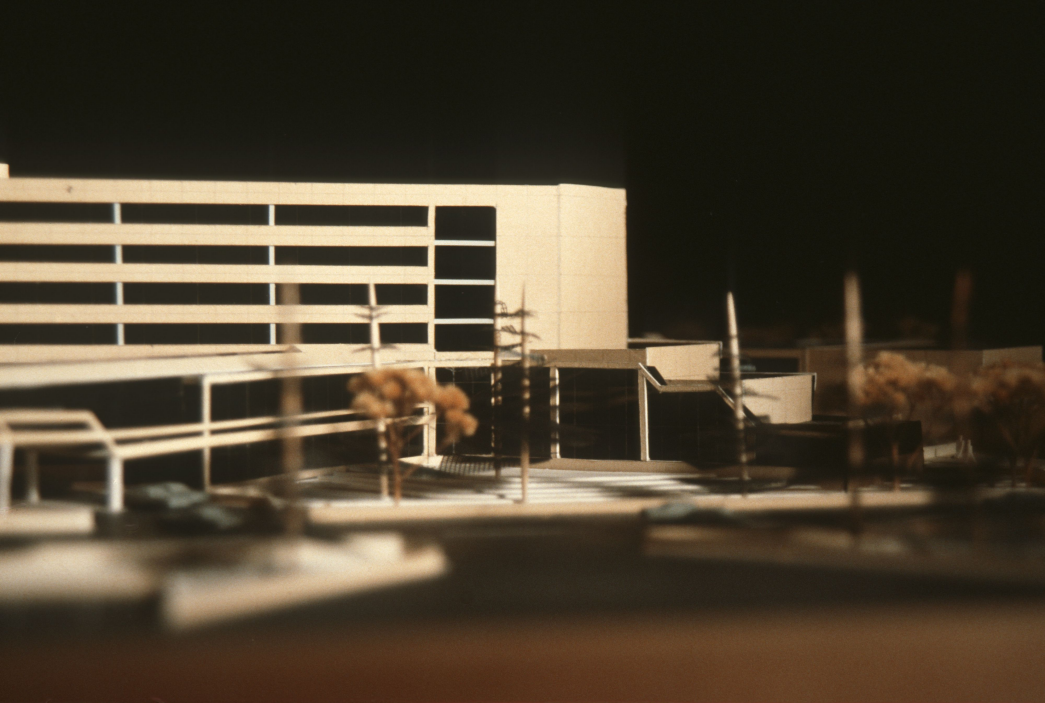


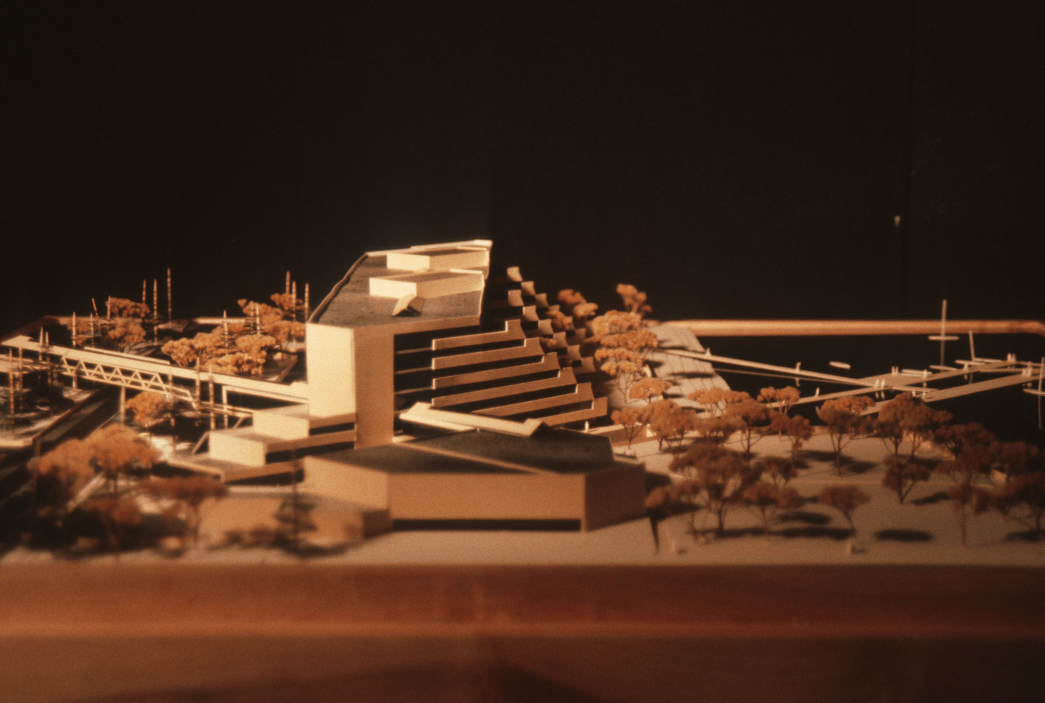
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DISTINCTIVE LODGING



KANDAHAR LODGE
A HOTEL JACUZZI SAUNAS

VACANCY
RESTAURANT
OPEN
TO PUBLIC
BREAKFAST
DINNER









