

B. Program

The resort's program is most neatly described with reference to the attached series of plans showing the layout for the twenty levels of the hotel and micro-climate (Figures I-8 through I-14).

Level 1 is principally a work area, with loading and storage facilities, the mechanical room, freight elevators and a kitchen. For the tourist, Level 2 is his introduction to the resort. Entering from the lake side of the resort, he finds a spacious foyer and the typical lobby conveniences of a major hotel: coffee shop, reception desk and news stand. But looking to either side as he walks in, the guest immediately realizes that this is more than just a hotel. To his right, he glimpses for the first time the tropical lushness of the micro-climate; to his left lies an artificial lake with a tiny seating area in the center. Just before the coffee shop is a shopping promenade with several small shops and boutiques. An exhibition area will show off Icelandic products and function as a small visitor center for hotel guests. In other words, from the instant they set foot in the resort, guests are made aware of its multi-purpose potential.

Level 3 is essentially reserved for the convention activities of the resort, with a conference hall, translation room, a smaller convention room, kitchen and a bar and restaurant. The Fourth Level is split between housekeeping functions (laundry, linen, employee and administration space) and further guest amenities. A large, semi-circular observation area rings the ice-skating rink, giving exceptional views of the lake and valley beyond. On the other side, a snack bar overlooks the micro-climate and all its activity below.

At this point, it might be easier to get an overview of the resort's program by looking at the design summary in Section B (Figure I-11). Most of the space from Level 5 to Level 17 is hotel rooms. The hotel is double-loaded, with one row of rooms facing out on the lake, the other overlooking the micro-climate. The graphic for Levels 7 and 9 show the hotel layout typical for Levels 5 through 17. Note from the layout presented on the preceding pages, however, that Level 8 is different. It contains smaller conference rooms, a beauty parlor and barber shop, but most important, the entire complex of health club, swimming pool, saunas and baths that are keyed to Iceland's best-known resource: hot water. As can be seen by reference again to Section B, the pools and baths are nestled under the roof at the peak of the mountain, such that Level 8 is the longest of all twenty levels of the resort.

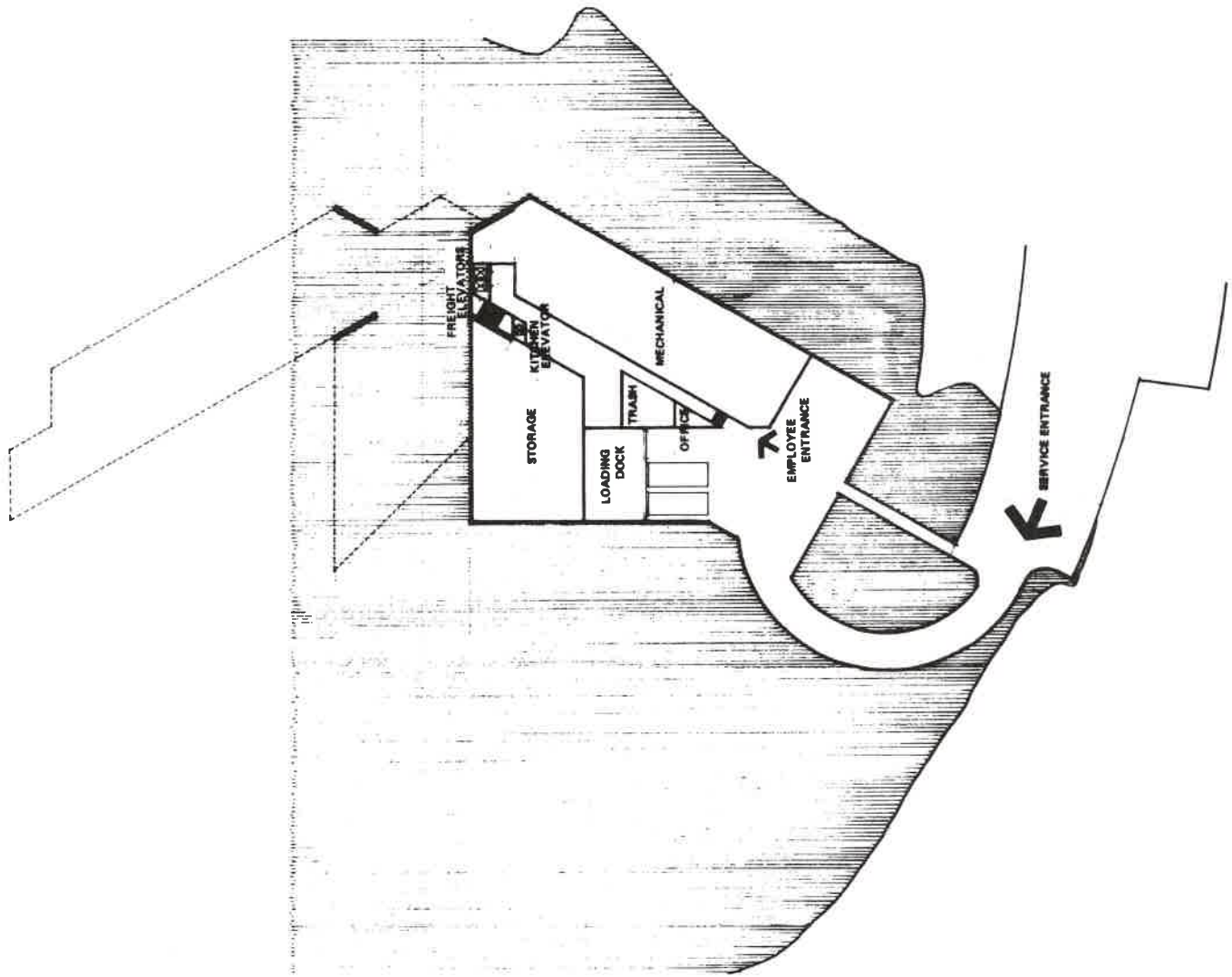
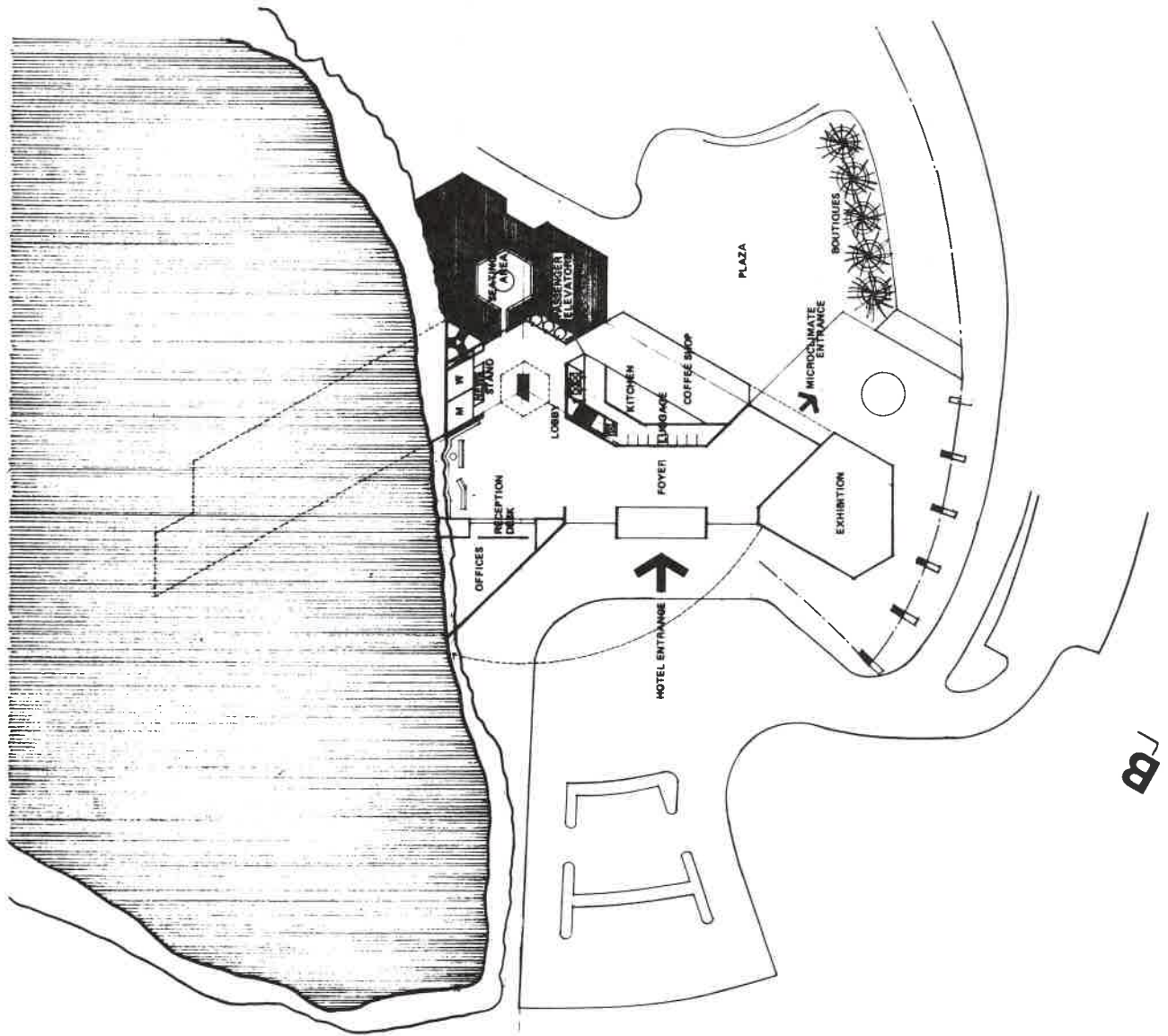


FIGURE I-8

MULTI-PURPOSE RESORT:
FLOOR PLAN

LEVEL 1 ELEVATION 208M

B



A

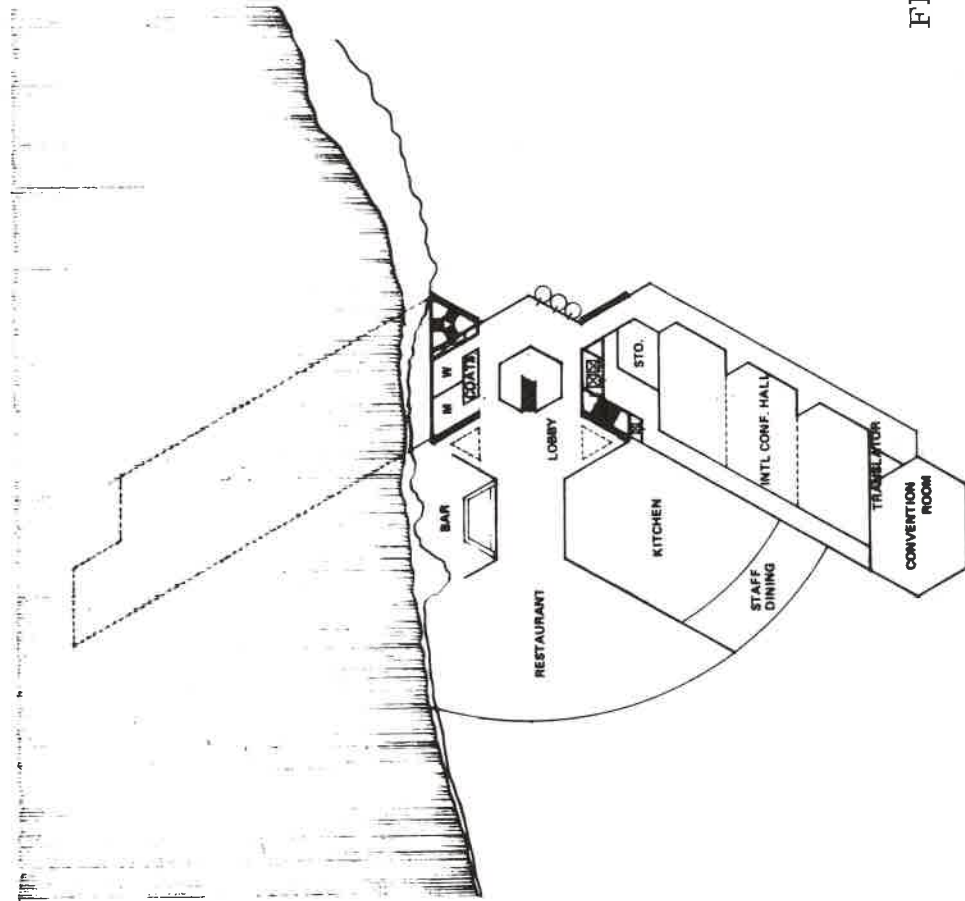
I-25

FIGURE I-9

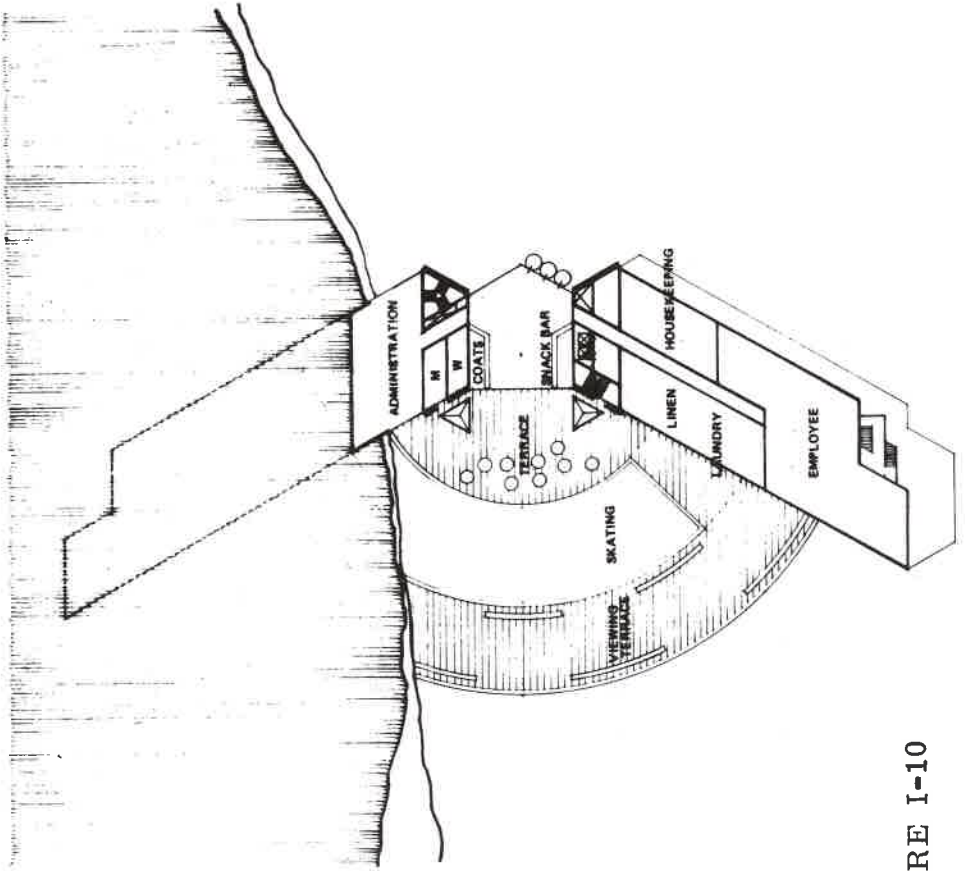
MULTI-PURPOSE RESORT:
FLOOR PLAN

LEVEL 2 ELEVATION 213M





LEVEL 3 ELEVATION 218M



LEVEL 4 ELEVATION 223M

FIGURE I-10
MULTI-PURPOSE RESORT:
FLOOR PLAN

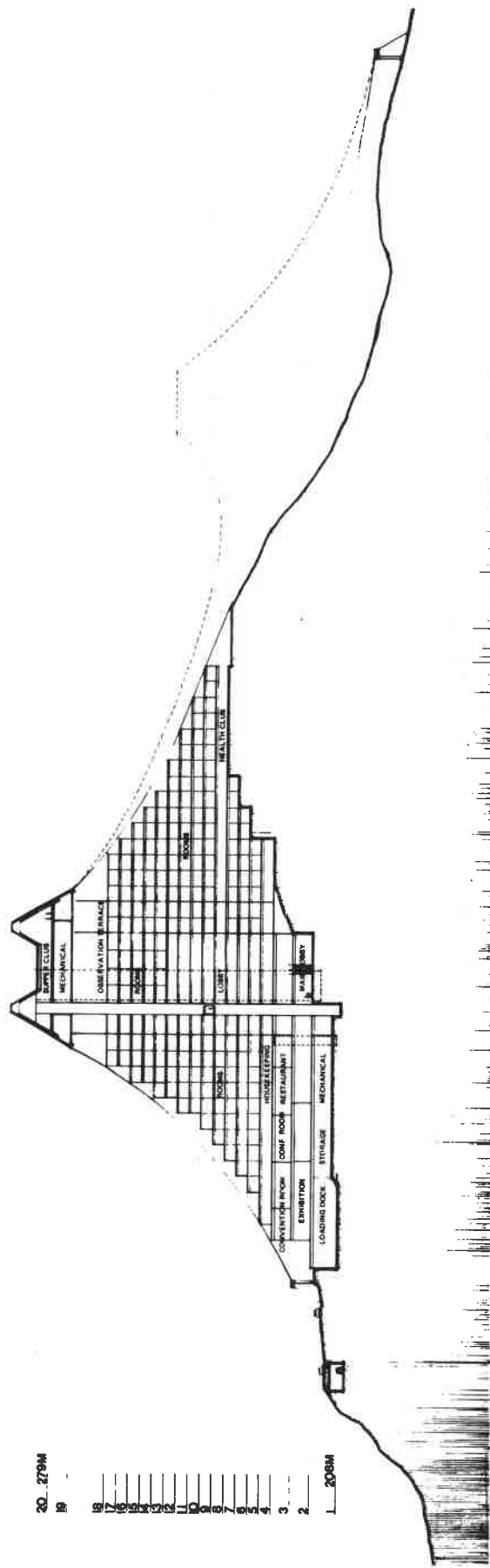
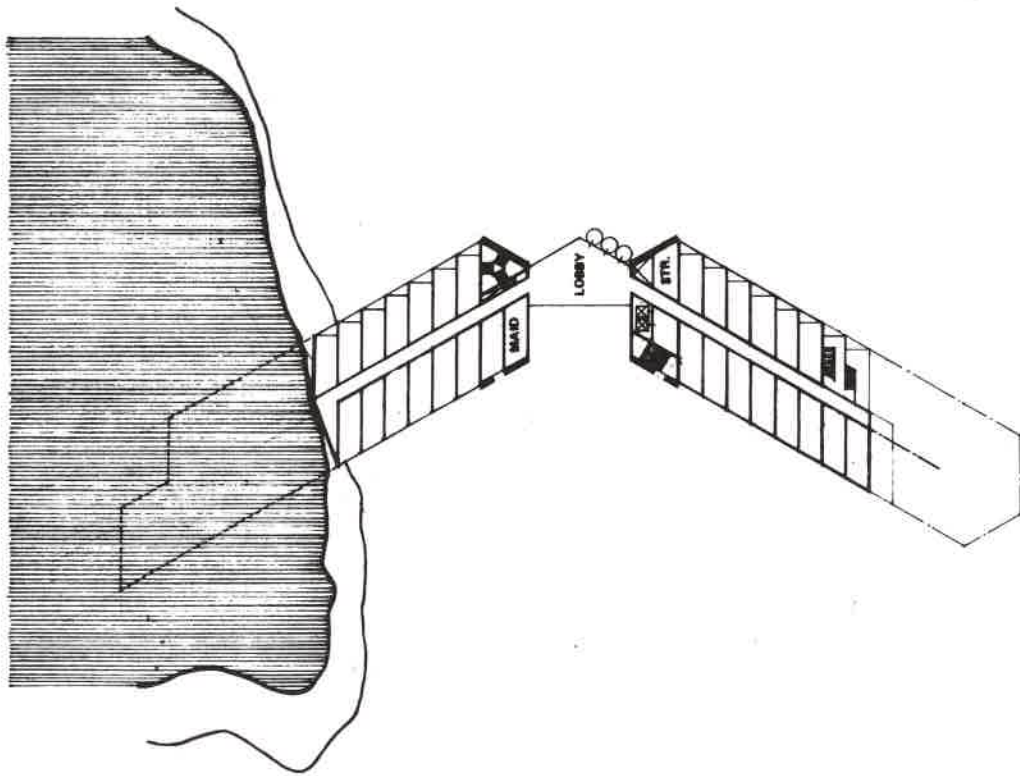


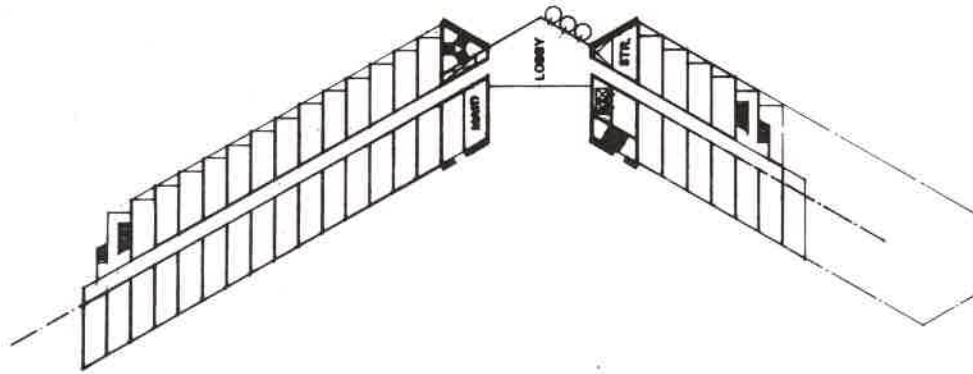
FIGURE I-11
 MULTI-PURPOSE RESORT:
 DESIGN CONCEPT

SECTION B
 0 25 50M



LEVEL 7

ELEVATION 232M



LEVEL 9

ELEVATION 238M

FIGURE I-12
MULTI-PURPOSE RESORT:
FLOOR PLAN

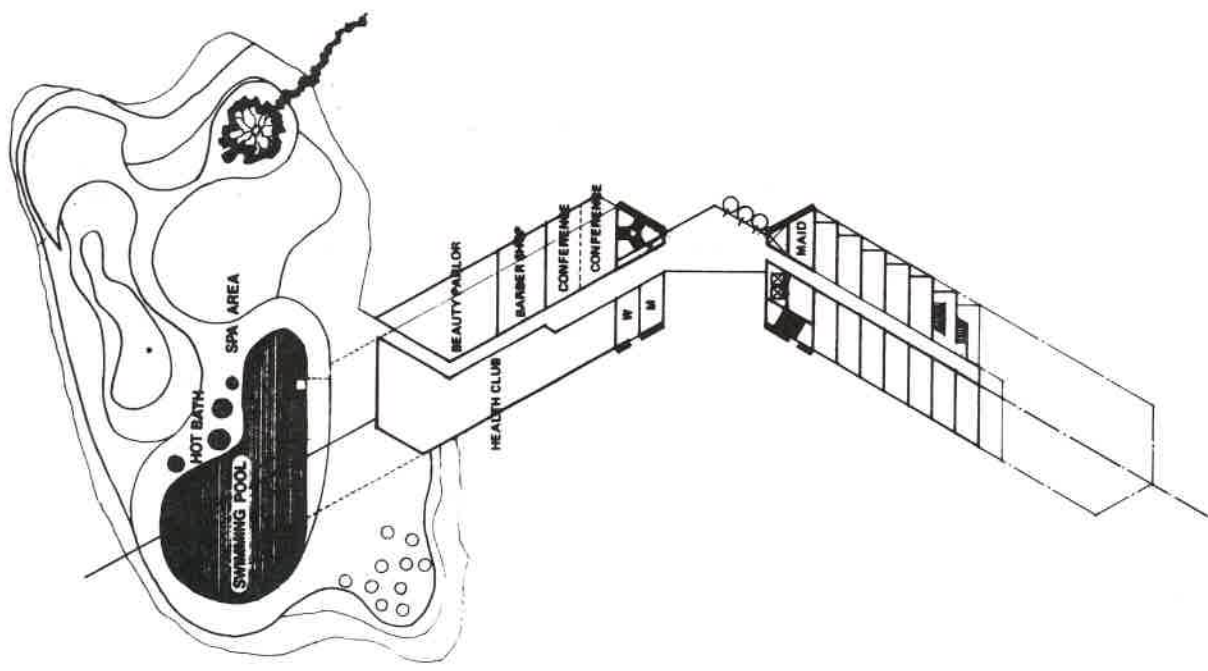


FIGURE I-13

MULTI-PURPOSE RESORT:
FLOOR PLAN

LEVEL 8 ELEVATION 235M

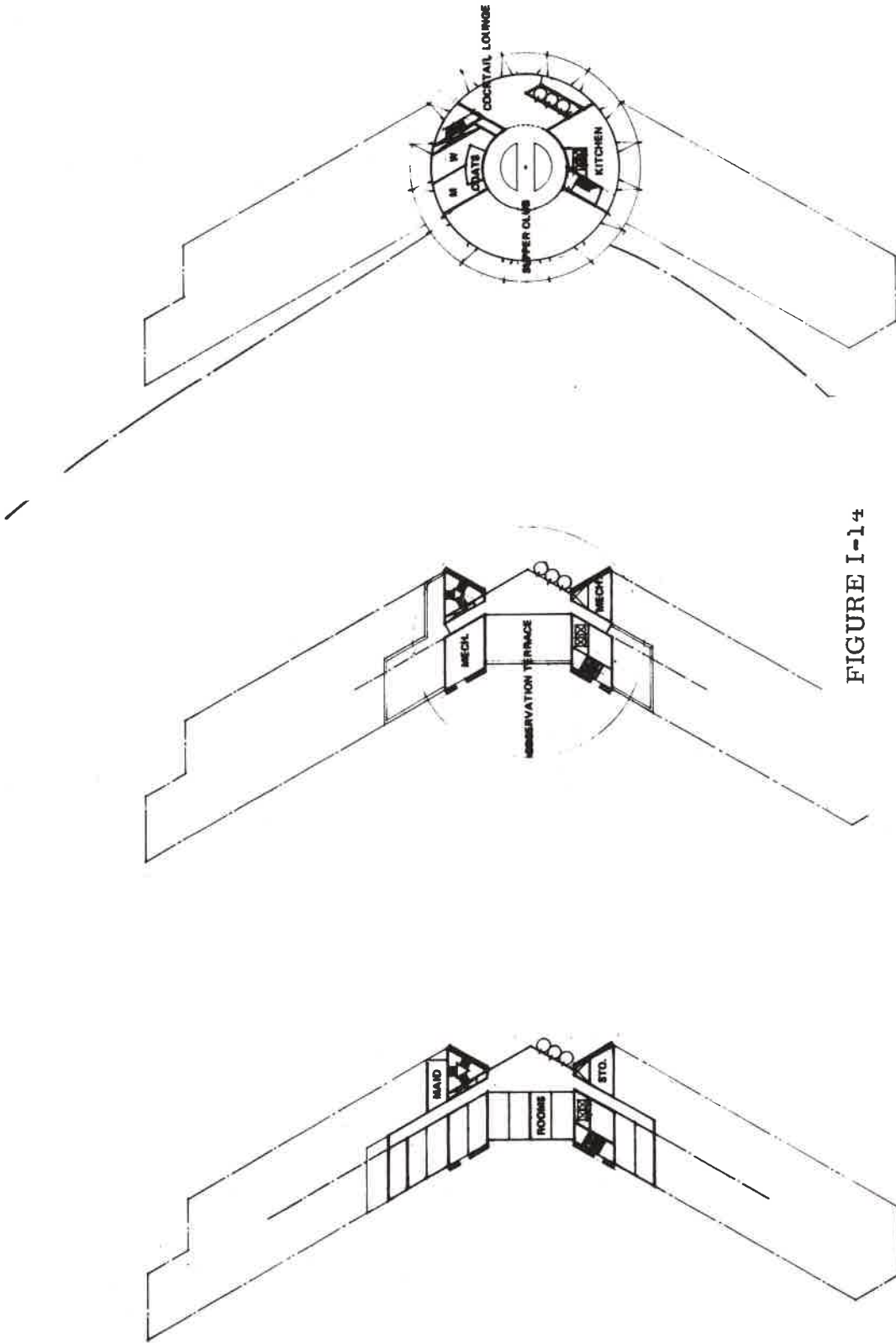


FIGURE I-14

MULTI-PURPOSE RESORT:
FLOOR PLAN

LEVEL 17 ELEVATION 262M

LEVEL 18 ELEVATION 265M

LEVEL 20 ELEVATION 279M

The final floor plan shows the circular levels that complete the volcano effect. Level 18 is divided between mechanical areas and an observation terrace that overlooks the lake, and Level 19 is taken up completely by mechanical space. Level 20 is reserved for the resort's most elegant and lavish area, the cocktail lounge and the supper club, which commands the finest view of the lake and valley.

The above description is clearly cursory, and cannot do justice to the uniqueness of design and ingenuity of approach that characterizes both the concept and program for the multi-purpose resort. In particular, it is apparent that the structure has been planned to minimize any possible environmental disturbance. This point is worth repeating, given the high priority that Icelanders accord to preservation of their unparalleled natural resources and the fragile balance of nature evident in so many ways in the country. In many respects, builders will find the abundance of energy resources lying so near the surface offers them a special opportunity of working with, rather than against, nature; this point emerges more fully in Appendix B, which summarizes the technical aspects of the multi-purpose resort.

To complete the discussion of the resort program, it will be helpful to refer to Exhibit I-2, which delineates the space requirements for the three components of the resort's program -- hotel, micro-climate, and other site facilities. The hotel space has been described level-by-level above. As for the micro-climate, it will be noticed that the space is divided among four levels according to the contours of Stora Lambafell. The activities on each fall into three categories: guest services, scenic attractions and commercial enterprises. Guest services include the children's play area, swimming pool and spas (although these last two should also prove to have commercial possibilities insofar as local visitors are included in their use). The bulk of the space, it is obvious, is given over to scenic attractions the likes of which have never been seen in Iceland: gardens, tropical landscapes and so forth. Lastly, hotel guests and local visitors will be able to browse through boutiques, take a break at the coffee shop or, later in the day, partake of entertainment and dancing under the micro-climate's translucent tent.

As shown in Exhibit I-2, the hotel will have other facilities normally found at a first-class hotel but which will be open to local visitors as well. A championship, eighteen-hole golf course is planned for the open area to the south of the resort, and this should be extremely popular with the local market, which is taking to golf in a big way.

Boating and fishing on the lake are naturals. Areas for sports, riding, and hiking will also be provided, as indicated in the overall plan for the use of the site which is shown in Figure I-15.

EXHIBIT I-2
PROGRAM SPACE REQUIREMENTS

I. <u>Hotel</u>	<u>Square Meters</u>
A. Guestrooms	
1. 300 Double Rooms	9.000
B. Public Areas	
1. Reception and Desk Area	300
2. Lounge	400
3. Grill Restaurant (250 seats)	500
4. Cocktail Lounge (100 seats)	200
5. Coffee Shop (200 seats)	300
6. Snack Bar	80
7. Bar	60
8. Observation Terrace	100
9. Exhibition	400
10. Convention Room (400 seats)	400
11. Foyer	200
12. Three Conference Rooms	900
13. Two Conference Rooms	60
14. Dressing Rooms/Storage	100
15. Drugstore	30
16. Ten Boutiques	300
17. Barber Shop	30
18. Beauty Shop	50
19. Nursery	80
	1,540
	2,060
	.490
C. Service and Storage	
1. Kitchens and Food Storage	610
2. Maid's Rooms Typical Floors	160
3. Housekeeper Office	60
4. Luggage Room	60
5. Housekeeping Storage	80
6. Soiled Linen Room	30
7. Trash Room	50
8. Garbage	30
9. Laundry	200
10. Miscellaneous Storage	200
	1,480
D. Administration and Staff	
1. One Receptionist Office	25
2. One Secretaries' Office	25
3. One Manager's Office	25
4. One Assistant Manager's Office	15
5. One Telephone/Telex Room	15
6. One Purchasing Office	12
7. One Food and Beverage Manager's Office	12
8. One Sales Office	12
9. One Secretary/Clerk	10
10. One Conference/Meeting Room	25
11. One Accountant's Office	12
12. One Personnel Office	12
13. One Payroll Office	20
14. One Spare Office	45
15. One Staff Dining	120
16. Staff Area (lockers, toilets, changing, etc.)	250
	.635
E. Spa	
1. Health Club and Indoor Game Room	.400

(continued)

EXHIBIT I-2 (continued)

	<u>Square Meters</u>	
F. Mechanical Space		
1. Mechanical Equipment Rooms	580	
2. Workshops	<u>140</u>	720
G. Summary		
1. Guestrooms	9.000	
2. Public Areas	4.490	
3. Service and Storage	1.480	
4. Administration	635	
5. Recreation	400	
6. Mechanical	<u>720</u>	
Sub Total	16.725	
+ 30% Contingency and Circulation	<u>5.017</u>	
GRAND TOTAL: HOTEL		21.742
II. Microclimate		
A. Lower Area		
● Planting typical of the original island		
● Lake with Aqua Tunnel		
● Center for Nature Study		
● Aviary		
● Miniature Village		
● Children's Play Area		
● Tennis Courts		
● Swimming Pool		
● Theatre		
● Entertainment and Dancing		
● Nursery		
● Gardens		
● Playing Fields		
● Pathways		
B. Hillside		
● Flower Gardens		
● Walkways		
● Overlooks		
● Rock Gardens		
● Waterfall		
C. Plaza Level		
● Coffee Shop		
● Exhibition Area		
● Tropical Planting		
● Orchid Garden		
● Shops and Boutiques		
D. Hilltop		
● Spa with Hot Baths		
● Swimming Pool		
● Geyser		
● Tropical Planting		
TOTAL		60.000
III. Site Facilities		
A. Golf Course, 18 holes with clubhouse, parking 150 cars		
B. Sports Fields		
C. Riding and Hiking Trails		
D. Fishing		
E. Skating Rink		
F. Boating		
G. Parking, 500 cars (100 under cover)		

IV. FINANCIAL FEASIBILITY

With the complexities of construction and operations inherent in a resort, a great deal of time has been expended in developing the related cost items. These are summarized in this section. The figures presented are based on prices prevailing in autumn, 1974, and to some extent they are dependent on exchange rates prevailing during that time. This means that adjustments must be made to bring the figures up to current values, but this is unavoidable in any planning effort under the kind of rapid price changes and devaluation being experienced in Iceland.

A. Capital Costs

Exhibit I-3 on the following page summarizes the total capital requirements for the Multi-Purpose Resort (hotel and micro-climate), which total almost \$59 million with the inclusion of new surfacing for the main road into the site. The estimates are the combined work of our Icelandic architect-counterpart, The Architects Collaborative and associated American engineering firms.

More detailed estimates of certain site and micro-climate expenses are shown in Exhibit I-4. Careful reading of both statements is warranted, for they demonstrate not just the care of estimation taken throughout, but the multiplicity of activities planned for the micro-climate.

Finally, readers will note the high level of general infrastructural expenses necessary for site work and the main road. This underscores the point made elsewhere in this report that, while one can conceptually separate the operation of the hotel from that of the micro-climate, in fact the former depends on the latter for its marketability and appeal to both foreign and local visitors.

EXHIBIT I-3

CAPITAL COSTS: MULTI-PURPOSE RESORT

A. Site

1.	Electrical Service	\$ 230,000
2.	Primary Switch	840,000
3.	Fire Protection and Water Supply	720,000
4.	Communication	240,000
5.	Sewage Treatment	1,560,000
6.	Geothermal Plant	1,020,000
7.	Site Road	545,000
8.	Site Parking	310,000
9.	Site Planting and Golf	1,750,000
10.	Waterfront Development	150,000
11.	Outdoor Recreation	95,000
		<u>\$7,460,000</u>

B. Hotel

1.	Construction cost including mechanical, furnishings.	\$13,940,000
	-This figure excludes the following from the detailed estimate. These figures are carried elsewhere in this summary:	
	a. \$2,090,000 for 19 km of main road.	
	b. \$130,000 for site road, carried as a higher figure above.	
	c. \$600,000 for geothermal plant, included in site costs above.	
	d. \$230,000 trunk electrical service, included in site costs above.	
	e. \$300,000 for sewage, included in site cost above.	
2.	Consumables	400,000
3.	Pre-opening expenses	450,000
		<u>\$14,890,000</u>

C. Microclimate

1.	Cable network	\$ 4,500,000
2.	Surface	5,400,000
3.	Boundary Structure	6,120,000
4.	Electrical	3,600,000

EXHIBIT I-3 (continued)

5.	Heating/Ventilating	3,840,000
6.	Plumbing	960,000
7.	Fire Protection	1,200,000
8.	Special Structures	1,200,000
9.	Earthwork	510,000
10.	Planting and Grass	1,940,000
11.	Pavement	880,000
12.	Recreation and Entertainment	205,000
13.	Miscellaneous Development	275,000
14.	Vertical Enclosures	1,200,000
		<u>\$31,830,000</u>

See detailed breakdown of microclimate site costs for items 9 - 13 above.

D. Miscellaneous

Fees \$ 2,700,000

TOTAL PROJECT,
excluding main road \$56,880,000

E. Main Road (19 kilometers) \$ 2,090,000

EXHIBIT I-4 (continued)

C. Site access road: 1 km road from existing road to hotel.

1. Pavement 7.3 meters wide x 1 km - 7,300 square meters @ \$10.00 =	\$ 73,000
2. Shoulder 3.6 meters wide x 1 km - 3,600 square meters @ \$4.15 =	15,000
3. .3 m gravel: 3,215 cubic meters @ \$1.65 =	5,300
4. Rock removal: 7,500 cubic meters @ \$5.00 =	37,500
5. Earth cut: 11,000 cubic meters @ \$.82 =	9,000
6. Dam core fill: 50,200 cubic meters @ \$3.85 =	193,300
7. Earth fill: 17,600 cubic meters @ \$1.65 =	29,000
8. Lighting: 30 poles @ \$1,000 =	30,000
9. Drainage: 60 meters @ \$100 =	6,000
10. Impoundment drainage, includes wiers, etc: 240 meters @ \$150 =	36,000
11. Bridge =	85,000
12. Signs, painting, contingency @ 5% =	<u>26,000</u>
Sub Total	\$ 545,100

D. Waterfront Facilities

\$ 150,000

E. Outdoor Activities

1. Tennis: 4 courts @ \$12,000 =	\$ 48,000
2. Soccer =	5,000
3. Horseback trails =	12,000
4. 2 km walking paths, 1.5 wide @ \$10 per square meter =	<u>30,000</u>
Sub Total	\$ 95,000
<u>Exterior Total</u>	\$2,850,600

EXHIBIT I-4 (continued)

II. Micro-Climate (Interior space 5.9 hectares)

A. Earthwork: average approximately 2 m. cut and fill for 5.9 hectares = 120,000 cubic meters.

1. 30,000 cubic meters rock @ \$10.00 =	\$ 300,000
2. 30,000 cubic meters earth @ \$.82 =	24,600
3. 60,000 cubic meters fill @ \$1.65 =	<u>99,000</u>
	\$ 423,600

B. Topsoil and grass: .85 hectares

1. 18 cm topsoil: 1,530 cubic meters @ \$2.00 =	\$ 3,100
2. Grass @ \$4,000 per hectare =	<u>3,400</u>
Sub Total	\$ 6,500

C. 2.65 hectares planting

1. 120 trees per hectare @ \$1,000 =	\$ 318,000
2. 200 trees per hectare @ \$500 =	265,000
3. 370 shrubs per hectare @ \$125 =	122,500
4. 12,300 bulbs or plants per hectare @ \$.45 =	14,600
5. 6,100 ground cover plants @ \$1.00 =	16,100
6. 45 cm topsoil: 11,900 cubic meters @ \$2.00 =	23,800
7. One year maintenance and establishment @ 15% =	<u>114,000</u>
Sub Total	\$ 874,000

D. Pavement

1. Hard pavement (brick, stone concrete, tile) 18,000 square meters @ \$38 =	\$ 685,000
2. Soft pavement (gravel, cinders) 5,600 square meters @ \$8.15 =	<u>45,700</u>
Sub Total	730,700

EXHIBIT I-4 (continued)

E. Recreation and Entertainment

1. Two tennis courts @ \$10,000 =	\$ 20,000
2. Two pools @ \$45,000 =	90,000
3. Amphitheatre =	<u>60,000</u>
Sub Total	\$ 170,000

F. Miscellaneous

1. Shops and plaza development	\$ 135,000
2. Miscellaneous retaining walls	60,000
3. Furniture and miscellaneous equipment	<u>30,000</u>
Sub Total	\$ 225,000

Micro-Climate Total \$2,429,800

B. Operating Costs

An undertaking as ambitious as the multi-purpose resort cannot expect to reach its full operating level for some years after opening. Therefore, adjustment is made later to show, in terms of cash flows, how the gradual attainment of projected operating levels affects the resort's financial performance. For the moment, however, let us concentrate on performance once full operations have been attained.

It will be convenient to treat all revenues from the resort as accruing to the hotel, and operating costs of the micro-climate, estimated at half a million dollars, as included in hotel costs. In effect, once the micro-climate is built, its operations can be covered by the hotel without further outlays.

As shown in Exhibit I-6, full operations at the resort are expected to generate a pre-depreciation, pre-tax profit of some \$3.3 million. This exhibit is in fact a summary sheet for a variety of items which appear in greater detail in the statements that follow.

Exhibit I-5 below shows the items that make up total room sales of \$3 million.

EXHIBIT I-5

MULTI-PURPOSE RESORT: ROOM SALES, HOTEL*

1.	Singles: 43,500 rooms @ \$60/night	\$2,610,000
2.	Additional persons: 22,200 @ \$20/night	<u>444,000</u>
	TOTAL	\$3,054,000

It is assumed that, as elsewhere in the world, an average of 1.5 persons will occupy each room when it is used (i. e., an equal number of singles and doubles will be sold). Thus, if the charge for a single is \$60 per night, and the second person in a room is charged \$20 per night, the total revenues are derived as shown above. The estimate of number of rooms sold is based on the projected occupancy figures discussed later in this section.

* Not including convention package sales.

EXHIBIT I-6

MULTI-PURPOSE RESORT:
 OPERATING STATEMENT
 (Full Operations)

I. <u>Income</u>		
A.	Room Sales	\$3,054,000
B.	Food and Beverage Sales	5,264,500
C.	Convention Package Sales	700,000
D.	Other	<u>527,900</u>
	TOTAL INCOME	\$9,546,430
II. <u>Expenses</u>		
A.	Payroll	\$1,538,130
B.	Payroll Taxes	112,420
C.	Cost of Food and Beverages	2,262,900
D.	Cost of Entertainment	72,150
E.	Repairs and Maintenance	164,000
F.	Electric and Heat	162,750
G.	Laundry, Glasses, Linen, Silverware, Etc.	325,500
H.	Micro-Climate Expense	500,000
I.	Golf-Course Expense (Net)	13,700
J.	Advertising and Promotion	200,000
K.	Insurance	320,000
L.	Other (Including Administration)	<u>500,000</u>
	TOTAL EXPENSES	\$6,171,550
	PROFIT FROM OPERATIONS (Before Depreciation)	\$3,374,880

Source: Checchi and Company estimates, 1975.

Food and beverage sales are calculated as shown in Exhibit I-7. For each type of facility, the number of seats and estimated food and beverage revenue per seat annually are shown. Revenues per seat are based on international figures for resort hotels and estimates of current revenues in hotel restaurants in Iceland, and reflect the relatively high cost of dining out in Iceland.

EXHIBIT I-7

MULTI-PURPOSE RESORT:
FOOD AND BEVERAGE SALES

Facility	# Seats	Food Sales/Seat	Beverage Sales/Seat	Revenues
Grill	250	\$5,000	\$2,500	\$1,875,000
Bar	30	---	3,000	90,000
Supper Club	135	5,000	1,500	877,500
Lounge	100	---	3,000	300,000
Coffee Shop	200	8,760	---	1,752,000
Snack Bar	40	7,300	---	292,000
Total				\$5,186,500
Plus Night Club Entertainment (covers)				<u>78,000</u>
GRAND TOTAL				\$5,264,500

Convention package sales are based on the assumption that the resort could attract 25 small conventions of an average of 100 persons, with each convention lasting an average of five days and four nights. A convention package rate of \$70 per night, slightly higher than convention rates in Europe but not so high as to be prohibitive, would then produce total convention revenues of \$700,000. It should be noted that the flat convention package rate would include all accommodations and food for the duration of the convention, as is usually done for convention sales.

Exhibit I-8 breaks out the remaining miscellaneous sources of income for the resort. Plays, films and other entertainment will be available to hotel guests and local visitors alike. The total revenues from entertainment are based on the assumption that the 265 nights when the convention facilities are not in use, other entertainment will be presented before audiences averaging 100 persons, who will be charged \$2.50 per ticket.

EXHIBIT I-8

MULTI-PURPOSE RESORT: OTHER INCOME

1.	Entertainment	\$ 66,250	
2.	Space rental		
	● Shop and boutique space:		
	300 square meters at \$12/month	43,200	
	● Beauty and barber shops:		
	80 square meters @ \$8/month	7,680	
3.	Laundry	200,000	
4.	Golf memberships	102,775	
5.	Swimming and exercise rooms	35,025	
6.	Micro-Climate admissions	<u>73,000</u>	
	TOTAL		<u><u>\$527,930</u></u>

Space rentals for the shops, boutiques, beauty shop and barber shop are likewise shown in Exhibit I-8, and reflect the advantages to shopowners of locating in the hotel, where a natural market for their wares and services will be established. The hotel laundry will cater primarily to hotel guests, but the golf course, swimming and exercise rooms and micro-climate itself will all be open to local visitors as well as to hotel guests. Golf course revenues are predicated on the projection that three quarters of the golfers in Reykjavik will join the club at the hotel at an annual fee of \$100, as will one quarter of the golfers elsewhere in Iceland. Those who are not members will probably also want to play the course, and will pay a fee of \$5.00 each time. It

should be pointed out that golf is growing very rapidly in Iceland, and that there is no truly first-class eighteen-hole course in existence. The estimate of revenues from golf memberships is thus likely to be conservative, based as it is on current demands.

Swimming and exercise revenues are based on the assumption that 20 percent of hotel guests will use the facilities at a charge of \$1.50 per day, as will five percent of the local visitors. Local visitors to the micro-climate in general are projected at 200 persons per day on average, each of whom will pay a \$1 admission. The micro-climate admission will of course be free to hotel guests.

It would be well to review here the projected occupancy figures for the hotel on which the income is estimated. As demonstrated in Exhibit I-9, the full operations level of income is based on the ability of the hotel to attain slightly more than 69 percent occupancy on average per year. This is a high but certainly attainable level of operations. The average occupancy is shown on a month-by-month basis. The figures for June through August parallel current hotel experience during the peak season in Iceland. The shoulder months of May and September are in fact the principal convention months of the year, and it is during these months that a large share of the resort's 25 conventions can be expected. March-April and October figures are based on the likelihood of some conventions, those for November through February reflect current occupancy rates during those months in Iceland.

On the cost side, payroll costs are broken out by position in Exhibit I-10, with salary levels as they applied in the fall of 1974. It will be noted that while salaries are shown in terms of the amount paid out per employee, not all employees will be hired full-time. Salaries at the lower end of the spectrum in particular are liable to represent only part-time work.

Payroll taxes are of two sorts. There is first the salary tax, which is 3.5 percent of salaries paid. Secondly, the ensemble of social security taxes (old age and disability, accident insurance and unemployment insurance) is reckoned at an average of about \$4 per employee work-week. It is important to stress that the hotel is thus able to contribute its share of taxes from operations.

EXHIBIT I-9

MULTI-PURPOSE RESORT:
PROJECTED MONTHLY HOTEL OCCUPANCY

Month	Percent Occupancy
January	37 %
February	50
March	70
April	80
May	85
June	85
July	90
August	88
September	88
October	75
November	48
December	<u>33</u>
	69.1%

Source: Checchi and Company estimates, 1975.

EXHIBIT I-10

MULTI-PURPOSE RESORT:
PAYROLL AND EMPLOYMENT

POSITION	NUMBER	SALARY (Annual)	TOTAL	GRAND TOTAL
1. Hotel				
Reception	40	\$6,325	\$253,000	
Maids Shift	45	3,750	168,000	
Supervision	3	6,800	20,400	
Other Management Staff	9	6,325	<u>56,925</u>	
				\$ 499,075
2. Food and Beverage				
Managers Restaurant	12	6,800	81,600	
Staff	54	4,000	216,000	
Chefs	3	8,580	25,740	
Cooks	21	6,340	133,140	
Student Cooks	33	2,745	90,585	
Kitchen Help	30	3,300	99,000	
Cleaning	15	3,300	49,500	
Supply Room/Commissary	12	4,730	<u>56,760</u>	
				752,325
3. Snack Bar				
Cooks	1	6,340	6,340	
Student Cooks	2	2,745	5,490	
Staff	14	3,850	53,900	
Cleaning	1	3,300	<u>3,300</u>	
				69,030
4. Other				
Swimming Pool and Exercise	10	4,425	44,250	
Laundry	15	3,390	50,850	
Laundry Machine Operator	1	4,070	4,070	
Golf Course	15	4,600 (avg)	69,000	
Micro-Climate	<u>7</u>	7,000 (avg)	<u>49,000</u>	
				217,700
TOTAL	353			<u>\$1,538,130</u>

Source: Checchi and Company estimates, 1975.

All other costs are based on current experience in Icelandic hotels and in resorts world-wide. A number of points bear emphasis. A large advertising and promotion budget has been included, and a \$500,000 contingency for unincurred expenses added as well. Most of the administration expense is in personnel, which is counted in payroll. Most important, a \$500,000 contribution to operation of the micro-climate is included, reflecting again the dependence of the hotel on the existence of the micro-climate, not just for certain revenue items (swimming pool use, micro-climate admissions and so forth), but for the attractions needed to fill the hotel in general.

C. Cash Flow

The projections in the previous section apply to that period after which the hotel has attained full operational levels. That may take as long as five years, and the purpose of a cash flow analysis must therefore be to illustrate the consequences of this gradual achievement of full performance.

Exhibits I-11 and I-12 present cash flows for selected years from the first to the tenth year of operations. The first exhibit is based on the availability of 80 percent of the cost of constructing the hotel, repayable over 25 years at 7.5 percent (Exhibit I-11) and at 8.5 percent (Exhibit I-12). Total hotel construction costs, including an accrued portion of site and road work and the 5 percent fee, amount to \$21,367,000. The rationale for the particular financing assumptions is discussed in the following section.

The sensitivity analysis in the two exhibits is based on the hotel's reaching 40 percent of full operations in the first year of operation, 60 percent in the second and so on until 100 percent of full operations is achieved in the fifth year of operations. The analysis is continued through the tenth year to demonstrate the effects of diminishing interest payments over time on the cash flow and profitability of the hotel. In each case, the percentage of full operations determines the percentage of income earned for that year. Expenses, many of them fixed costs, are also shown for each year, and the operating profit derived. Subtraction of depreciation and interest expenses leave pre-tax profits (losses), which become positive during the third or fourth year of operations.

Income taxes are assessed at 53 percent of taxable income, which is pre-tax profits less the reinvestment premium of 25 percent of pre-tax profits. The reinvestment premium is a standard feature of Icelandic tax law, and it is assumed that the premium will be held in contingency for replacement of the hotel's translucent skin and micro-climate interior.

The net cash flow for the hotel becomes positive during the third year of operations, and approximates \$1 million as the interest payments decline over time. Several measures of return on investment are shown; the most important, the ratio of profits to total investment, is shown to vary from between 3 and 4 percent annually as interest payments decline. The return in profits to cash invested is from 16 to 18 percent.

EXHIBIT I-11

CASH FLOW STATEMENT
HOTEL WITH 7.5 PERCENT FINANCING*

YEAR	I	II	III	IV	V	X
% of full operations	40	60	80	90	100	100
Income	\$3.79	5.68	7.57	8.52	9.47	9.47
Expenses	3.48	4.38	5.28	5.73	6.18	6.18
Operating Profit	.31	1.30	2.29	2.79	3.29	3.29
(Less Depreciation)	1.20	1.20	1.20	1.20	1.20	1.20
(Less Interest)	1.28	1.18	1.08	1.03	.97	.82
Profit (Loss) before taxes	(2.1)	(1.08)	.01	.56	1.12	1.27
Income Taxes	-					
Profit (Loss) after taxes	(2.1)	(1.08)	.01	.34	.67	.77
Deduct Principal	.68	.68	.68	.68	.68	.68
Deduct Reinvestment Premium	-	-	-	.14	.28	.32
Add Depreciation	1.20	1.20	1.20	1.20	1.20	1.20
Net Cash Flow	(1.65)	(.56)	.53	.72	.91	.97
Return on Investment **						
a) Profits						
-Cash basis	(51)	(25)	-	8	16	18
-Total investment	(10)	(5)		2	3	4
b) Cash Flow						
-Cash basis	(39)	(13)	12	17	21	23
-On total investment	(7)	(3)	2	3	4	5
* All money figures in millions of dollars						
** All figures in percentage terms						

Source: Checchi & Company estimates, 1975.

EXHIBIT I-12

CASH FLOW STATEMENT
HOTEL WITH 8.5 PERCENT FINANCING*

YEAR	I	II	III	IV	V	X
% of full operations	40	60	80	90	100	100
Income	\$3.79	5.68	7.57	8.52	9.47	9.47
Expenses	3.48	4.38	5.28	5.73	6.18	6.18
Operating Profit	.31	1.30	2.29	2.79	3.29	3.29
(Less Depreciation)	1.20	1.20	1.20	1.20	1.20	1.20
(Less Interest)	1.45	1.34	1.22	1.16	1.10	.93
Profit (Loss) before taxes	(2.34)	(1.24)	(.13)	.43	.99	1.16
Income Taxes	-	-	-	.17	.39	.46
Profit (Loss) after taxes	(2.34)	(1.24)	(.13)	.26	.60	.70
Deduct Principal	.68	.68	.68	.68	.68	.68
Deduct Reinvestment Premium	-	-	-	.11	.25	.29
Add Depreciation	1.20	1.20	1.20	1.20	1.20	1.20
Net Cash Flow	(1.82)	(.72)	.39	.67	.87	.93
Return on Investment **						
a) Profits						
-Cash basis	(55)	(29)	(3)	6	14	16
-Total investment	(11)	(5)	(.6)	1	3	3
b) Cash Flow						
-Cash basis	(42)	(17)	9	16	20	22
- Total investment	(8)	(3)	2	3	4	4
* All money figures in millions of dollars						
** All figures in percentage terms						

Source: Checchi & Company estimates, 1975.

In summary, assuming that the micro-climate is constructed, the hotel portion of the Multi-Purpose Resort shows a positive return within five years of its construction. In so doing, it is able to absorb the operating costs of the micro-climate. But the analysis is couched in terms of several assumptions, all made explicit, the most important of which is the existence of the micro-climate as an attraction to hotel guests and local visitors. The levels of operating revenues are particularly dependent on the micro-climate.

Let us note also that the capital figures in this section are in no way comparable with those applicable to more conventional hotels. The structural requirements of supporting the adjacent micro-climate make the hotel much more expensive than another three-hundred-room structure would be in Iceland.