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CONTENTS

THE EVOLUTION OF SMALL BOAT SAILING IN AMERICA

INTRODUCTION TO THE CONCEPT OF THE UNITED STATES SAILING CENTER

USER NEEDS

FACILITY NEEDS — THE PROGRAM

THE SITE

CONCEPTS

POSSIBLE COURSES OF ACTION FOR THE DEVELOPMENT OF THE SAILING CENTER

SUGGESTED SCHEME

BIBLIOGRAPHY
THE EVOLUTION OF SMALL BOAT SAILING IN AMERICA
ABSTRACT

Several events and phenomena have influenced the growth of small boat sailing in America since the Nineteenth Century. They are:

The invention, production and widespread use of the motorboat and motorship as replacements for the older sailing designs used both for commerce and for pleasure;

The rise of the middle class in America and the increased costs of yachting in the traditional sense, where 40 foot yachts were considered "small”;

The yachting periodicals, which, until recently, were publishing new small boat designs and the instructions for building the boats. Mass production of these craft came only after the Second World War;

The two World Wars, which left many yachtsmen without their large boats and/or the unrestricted waters on which to sail them and forced them to sail in small boats in protected waters;

The technologies developed during W.W.II gave the U.S. a yachting industry and new materials suitable to industrial processes — specifically fiberglass, for building hulls having compound curves;

The marriage of the boat and the automobile via the boat trailer, which has made competitions on a national level possible; and,

The increased emphasis in all competition of the purely man-to-man contest, where the boats are so much alike that the differences are absolutely negligible.

The designing, construction and sailing of boats had been the province of the individual, and the best sailors were always men intimately acquainted with all aspects of the arts involved — they were craftsmen in every respect. With the advent of the wholly mass produced, standardized
small sailing boat, one wonders how long there will be such craftsmen and ingenious thinking in the sport.
A. CHARACTERISTICS OF THE SMALL SAILING BOATS:

In terms of length, these boats are usually less than 20' lwl. They are lightweight craft, generally less than 1500 pounds overall, and the crew is used to keep the boats upright when underway.

The boats have always been lumped into classes and given catchy class designations like "Sneakbox" and "Laser" or simply a number which means the length of the boat, like the "420", the "505" (lwl in cm) or the "International 14" (lwl in feet). Larger yachts are distinguished by the name of the designers or the yards which built them plus a number indicating the overall length of the boats, like the "Ericson 25" or the "Morgan 21".

The classes we will consider have a strong and vigorous racing heritage, versus a largely cruising heritage for the larger sailing yachts. Though many people who buy modern sailboats of all types are not concerned with competing in them, the vast majority of one design boats are built with racing in mind, and the class organizations which support them are geared to sponsoring the competition, not the cruising.

Most small sailing boats utilize the centerboard or daggerboard to resist side forces generated by the wind and sails, as opposed to using a deep, heavy keel. Contrary to layman thinking, the centerboard does nothing to keep a boat from capsizing, though this is one of the functions of keels. The original purpose of the centerboard was to allow the craft to maneuver in shallow waters; but its primary justification now lies in the fact that its light weight significantly reduces the total weight of the boat. The lighter the boat the quicker it can accelerate and the sooner it will lift onto a plane, leaving the heavier craft behind. And in the raised position, the centerboard allows the boat to be loaded easily onto a low slung trailer and taken to other waters.
Fig. 21. Pound-net scow from Cape Cod. Most of these boats were cat-rigged.
The pulse quickens when inland sailors hear the magic word 'scow', which has thrilled them for many years. The scow has a wide beam, shallow draft, and a square bow. It is a light, lively and extremely tender 'swept-up machine for smooth water sailing.

While minimum heel angle is stressed in most classes, scows with twin centerboards or daggerboards are often designed to sail their best at a 20° heel angle. On many scow classes, the crew may be using the bilgeboards as a foot rest, while hanging onto the 'monkey bars' shown above to keep the scow on its line.

Majority of scow classes have been standardized classics proving their merit continually during competition in the past years. One of the few new scow designs to appear in recent years is the M-20 scow detailed.

The M-20 is the brainchild of Bud Melges with his #1 winning its division in the 1963 OOA Race. With his crew, the well known boat writer, Bill Bentsen.

Bud and Bill as a team have collected hardware in a wide variety of classes, so they had a practical understanding of layout, hardware, and performance requirements.

We detailed the 'Splash', a stock M-20 used in the 1960 OOA Race, while on route to its owner. It won second in its division against rugged competition such as the Flying Dutchman, 505, and others. At first glance the M-20 may look considerably different to the one-design sailor. A closer examination will prove the hardware and other arrangements quite similar to many one-designs and easy to adapt to on short notice.

Other classes are the 20' cat-rigged Class C scow. The Class D scow is 20' long and sloop-rigged. The Class E scow is 28' and sloop-rigged. The Class A scow is 38' long and has been officially clocked at 26 knots.
Present sailing scow designs may trace their development back to the New Jersey Garvey, the Pound-net Scow of New England and the Great Lakes and the Barnegat Bay Sneakboxes of the mid 1800’s. Boats very similar to today’s racing scows could be found on the Great Lakes and in New England coastal waters in the 1890’s. These boats were gradually refined as a result of heated competition between these regions and Canada until the designs were effectively standardized in the 1930’s.

Though these craft were simple, easy to construct and inexpensive in the early nineteenth century, the modern boats have rounded chines and are just as complex and costly as the other hull types.

The V-bottomed Hulls:
This boat is characterized by lines which are essentially planar and, or course, by the V bottom itself. It is a type easily built by amateurs and can be sailed in almost any sea conditions.

V-bottomed boats did not appear in America until the late nineteenth century. Earliest recorded examples were used as fishing boats on Lake Champlain and were called “Sharpies” due to their pointed bows. Then, of course, there were the “Skipjacks” of the Atlantic Coast, the most famous of which were the Chesapeake Bay lobstermen; these are the only commercial sailing vessels in the U.S. today. Early “Skipjacks” used as yachts were very wide and heavily cagvassed with a reputation of being very fast and weatherly.

Several of the most popular designs today are V-bottoms: the “Snipe”, the “Lightning”, the “Windmill” and the “Star” are but a few. Generally, the deeper the “V”, the less there is the likelihood of the boat’s being able to pull up out of her bow wave into a plane.

Fig. 110. Drawings of an old skipjack used by Kumbralt for his instructions on building this type in Forest & Stream magazine in 1877, showing hull-form, construction, and rig then in use.

Fig. 118. Type of V-bottomed skip built at Chincoteague Island, Virginia, for fishing. Only two boats were alive in 1951.

Fig. 116. Plan of a small Chesapeake baynet or skipjack, showing hull-form and the massive construction that has enabled many of these boats to last fifty years or more of hard service.
The Rounded Hulls:
These are characteristically rounded in compound curves, which, in the age of wooden sailboats prior to W.W. II, required that they be laid up with narrow planks over frames by fairly skilled craftsmen. The hull type could be found in colonial America as "Skiffs" in New Jersey, the "Sneakboxes" of Barnegat Bay as well as in the ships' longboats, whaleboats and yawl-boats. A boat with lines very similar to those found in most modern rounded hulls was the Kingston lobster boat of the late 1870's. These boats, fully rigged, cost between $250 and $300.

Modern examples of this hull are the "Thistle", "Flying Dutchman", "Finn Dingo", "470", "505" and many more. All are made of fiberglass today from master molds by largely unskilled workers.

B THE EVOLUTION OF SMALL BOAT SAILING IN AMERICA

Though the mainstream of the American sailing scene in the last half of the nineteenth century in America was with those owning large schooners and keelboats, inland and coastal waters sported nearly 200 different types and subtypes of small sailing craft, some of which are shown here. The vast majority were not built for pleasure but for fishermen, pilots, loggers, traders and hunters. Each boat had a job to do; it was developed for its own conditions and was eminently suitable for its work after decades of improvements.

If you were living in 1875 you would think the future of these craft — silently and efficiently plying their trades — was bright. But the fact is that all but a handful would be extinct by 1920. Why? The motor, in a word.

5. Ibid.; pp. 3-7.
Fig. 39. Last model used in the Kingston lobster boats, in which racing had shown its effects in form and fittings, as well as in greater ease.

Figure 67. Sail plan of the mud-bagger vessel.

Fig. 38. A working Kingston lobster boat, before racing had affected the model.
Steam and gasoline motors spelled the end of these boats as much as they did to the horse-drawn carriage. The versatility and improved speed in any direction a motorboat offered to the commercial trades the elements of predictability and efficiency. The older sailing craft were either discarded or refitted with engines.

Yards which had built the small boats either converted to constructing motorboats, folded up in disgust or spruced up the old designs to be suitable to a small but growing market: the small boat yachtsman — the man who sailed purely for his pleasure. The old designs were revised. Mahogany was substituted for pine, bronze and brass for the traditional galvanized iron, floorboards and additional seats were made, and the boats placed on the market. Some are still being built today: the Cape Cod Dory and Cat and the Sneakbox are three, and sales are increasing as the years go by in spite of the thousands of new designs.

As the huge yachts of the late nineteenth century became more and expensive to build and man, yachtsmen began to turn to the smaller sailing craft and motorcruisers. A strongly based middle class was growing in America at the turn of the century, and, though the pleasures and status of yachting were being sought, the harsh realities of increasing costs were all too real. But small boat yachting really achieved its impetus as the middle class moved into the Interior, where only inland waters were available and where the small centerboard boats were able to sail in many cases.  

There was no real industrial production involved in the building of these craft until after W.W.II; each boat was built by hand by either a small yard or by amateurs. Magazines like Yachting, Rudder and Field & Forest featured new designs with the necessary drawings and instructions as well as performance reports for as many as five boats as issue, and many boats began to appear all over the nation, often in

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waters where they really did not belong.

Long established yachting associations soon were aware that many of these craft were unsafe and/or unfit for service on any water, and they also saw the spectre of conducting regattas in which few boats even resembled each other. There was clearly a need for regulation and standardization of the designs for the sake of safety and fair competition. The Inland Lake Yachting Association, established as a loose confederation of Great Lakes yacht clubs in 1898, began by recommending a number of types of boats and proclaiming that certain competitions would be held for all boats to see which would prove the fastest and most seaworthy. Other associations and yacht clubs began promoting certain designs by offering trophies and scheduled races and, in some cases, the boats themselves. Members of a yacht club or sailing community often banded together, agreed on a design and built the boats themselves in the club maintenance shops.

The traditional yachting community had looked askance at the activities of the cockleshell sailors (it still does, to some extent), but there was general agreement that all these efforts were positive and something good would come of it. The stodgy International Yacht Racing Union began to take notice, and, as a result, it established so-called "International" classes to deserving designs and sponsored the resulting competition between nations.

Then came W.W.I, a windfall for small boat yachting. All large yachts were commissioned in the Coast Guard Auxiliary for shore patrol duty, fuel was rationed and the movements of yachts was limited to restricted zones. The yards and fittings industries were pressed into the war effort. Anyone who wanted a new boat had to build it himself, if he could get the materials. Many former large boat skippers who ordinarily wouldn't be caught dead in a small boat, aside from the yacht dinghy, were soon happily bobbing around in the little cockleshells within the boundaries of the restricted zones.

7. "20 Years Ago This Issue": Yachting; vol. 71, no. 2 (February, 1942), p. 84.
After the War, the Olympic Games resumed, and yachting was included in the competition. An Olympic "Selection Committee" designated the types of craft to be used as the competitive platforms, and two small boats were added to the list of keelboats. To encourage the "complete sailor", the man who designs, builds and sails his own boat, the two boats were only loosely described and could be developed with considerable latitude. They were the "International 14" and the International 10 Square Meter Sailing Canoe". The '14 is considered to be the Granddaddy of the modern planing boats while the Canoe turned out to be simply the fastest monohulled boats in the world, aside from the 38' Class "A" Scow.

The Olympics reached a frenzy in the '30's, and keelboats were re-entered in the competitions with only one small boat, fittingly called the "Olympic", allowed in the Berlin games of 1936. The U.S. team was lost in the rivalry between the European nations. After the Second World War it would be a different story entirely.

Another contributing factor to the growth of small one-design yachts in America during this period was the expansion of the intercollegiate regatta circuits. This competition, formerly concentrated among the Ivy League schools, began to spread rapidly. New associations were formed, boats built or bought and regatta schedules established. Most future Olympic contenders cut their teeth in these competitions, which were team—not individual—efforts (Team racing is seemingly being inverted now in the U.S. when, in truth, there are many strong precedents both here and abroad.).

Within days after the U.S. became involved in W.W.II, all yachts longer than 30 feet were again commissioned in the Auxiliary, and the Yards were virtually instantly converted to war production. With the incessant threat of U-boats along the Atlantic Coast and Japanese submarines on the

Pacific Coast, yachting in coastal waters was out of the question. The Coast Guard forbade yachting altogether in areas near major military and naval installations. Once again boat building was put on the amateur level. Once again the periodicals abounded with boat designs and ideas as well as news of the new techniques being discovered in the war industries. Interest in small boat sailing and development really increased in the U.S. during this war for sailors were forced to stay inshore or sail in fresh water.

The state of the boat building art was given a shot in the arm by the War. At first, there were the resinosous glues which promised rigid joints and firm laminates. Then followed the Vidal Process for laminating plywood in thin strips over molded forms to produce rounded, lightweight shell shapes which were rigid and integral. The first U.S. boat to make extensive use of it was Sandy Douglas' "Thistle", though not available until 1945.

But probably the greatest outgrowth of the war industries for the small boat sailors was the development of fiber-glass for hull construction by Owens-Corning. It was made generally available by 1948, and many types of boats were on the market by 1950. At last it was possible for a design to be fully controlled and standardized as well as produced with modern industrial techniques and unskilled labor. Today there are very few wooden boats being built; each is now considered a custom job. Boat building has changed course by 180 degrees; but the older wooden boats are increasing in value greatly, and if the petroleum shortage becomes critical (it will, in time), there will be a resurgence of the material or another revolutionary discovery.

11. Deed, William J.; "Plywood and Plastics for Boats"; The Rudder; vol 60, no. 12 (December, 1944), p. 32.
While the small boat racing scene had flourished in the U.S. during the War, it was severely ravaged on the Continent and in Britain. What racing there was was under the constant threat of the German gun. At the end Europe's large yachts were in shambles, even if lucky enough to escape the destroyers aircraft, armies and navies. America emerged unscathed with a strong foundation of small sailing craft designs and well established sailing areas by comparison. Its strong middle class was young and eager to develop new peaceful industries, new processes, new products and new ways of living — and playing. The phenomenon of "boat shows" began 'in earnest in 1948, and each "Show Issue" of the yachting periodicals grew thicker and more colorful as each year went by.

The Olympic Games were revived in 1948, and in the five classes competing, the U.S. claimed two Gold, one Silver and one Bronze Medal. Classes designated as "International" by the I.Y.R.U. were competing for selection as Olympic classes by the Selection Committee. For it meant that anyone interested in competing in the Games would have to buy the boat and beat all of his country's challengers to go to the Games. Now it doesn't quite work that way, but the status of Olympic selection is definitely money in the builders' pockets today, no matter how it works.

Though there are more and more inexpensive, standardized, mass-produced boats on the market every year, the total membership in each class is not really impressive. The most successful designs have been the "board boats" like the "Surfboat" and "Laser" which can claim roughly 100,000 boats sold each since their beginnings in the '60's. Of the larger boats, the "Lightning" and the "Snipe" are probably the most successful, each selling no more than 22,000 since the first boats were built in the 1930's. Many of the classes can only boast a population of 2000 to 4000, and many others have sold less than 2000 over a period of 20 years.

Several innovations outside the boating industries have had much to do with its growth. One advantage of the small boat is that it can easily be loaded on a trailer and taken to distant regattas, and the advantage is obvious when one considers that the number of boats in each class is small and perhaps spread throughout the nation. Without the availability of the boat trailer and the proliferation of the Interstate Highway system the level of yachting competition and the spread of the various designs would be restricted. As it is, each class can host regional and national scale regattas and obtain the best competition possible, and this allows each class to determine its best boat developments and sailors. More importantly, this phenomenon allows the competitors a sense of competitive level.

Level? As an example: I know after racing in our local fleet at Prairie Creek Reservoir that I am a real hot dog sailor because I can win my share of races. I learn a sense of competitive level when I go to the District Regatta and place in the upper half of the lower third of the fleet!

The ultimate in portability has been achieved possibly by the so-called "board boats" — the "Sunfish" and the "Laser" are the most popular currently. Because of their inate and complete simplicity and standardization, true man-to-man competition is now possible without regard for the possibility of a "favored" boat. Sailors from all classes are increasingly joining in the major national and regional competitions in these boats to see just how good they really are — to learn their competitive level on an interclass basis. (Usually they are beaten by younger, more agile, more daring sailors who do nothing but sail these boats...)

The "Laser" has been selected to compete in the Games in 1976, and, conceivably, the contest will be man-to-man at last in this sport. Actually, it was always man-to-man; but the concept of the "Compleat Sailor" is changing. The man who
is capable of designing and racing his own boat better than any other in his country is becoming more the exception than the rule.

True, the best sailors today are more often than not involved in some way in the yachting industry; but the racing scene is peppered with many new champions every year who seem to come to the top ranks with little design experience. The total level of competition is rising dramatically, fed by an expanding equipment industry and a growing library of yachting literature. The gaps between the fastest and the slowest in nearly every fleet are closing rapidly.

But the stage for the competition and the way it is conducted have not developed commensurably. The amateurish race committees still set the courses improperly and conduct the procedures uncertainly, frequently giving in to the demands of the competitors, who may or may not be correct. Many talented sailors have left the race courses in anger as a result. When the sandlot softball game goes little league usually the competence of the umpires increases commensurably.

The yacht clubs in this country are not meeting the needs of the small boat sailors on the various regatta "circuits". Few accommodations are available near the clubs. Much time and money are spent commuting between club and motel. Camping at the clubs are sometimes tolerated, but those who prefer walls and showers face travel time.

Boat handling facilities at most clubs are not geared for an influx of 50 to 150 extra boats and crews, all launching at once and seeking optimal moorings.

Those club members not involved in sponsoring the regatta are usurped by the "invaders" and are frequently and justifiably angered when they find their parking place, mooring and place at the bar taken by strangers.

At this rate, yacht clubs are going to be the losers in the long run. They are being unnecessarily taxed by the great
and special demands of the regatta scene — they are the
victims. The club, traditionally the bastion of socializing
and hobnobbing is now periodically a madhouse.

It's time for a change. Either yacht clubs hosting
the large regattas must provide professional calibre race
committees, nearby accommodations and services, and safe,
adequate boat handling facilities, or there will be further
erosion of the quality of competition and an accompanying
disappearance of the yacht clubs which are willing to
support this racing.

The change might be here already in the form of the
United States Sailing Center.
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THE CONCEPT OF THE UNITED STATES SAILING CENTER

SPECIFICALLY AIMED AT THE BROAD BASE OF THE AMERICAN YACHTING SCENE, THE SMALL BOAT SAILOR, THE SAILING CENTER OFFERS THE FOLLOWING SERVICES FOR ONE PRICE IN ONE PACKAGE:
1. FULL ACCOMMODATIONS FOR COMPETITORS AND THEIR FAMILIES — LODGINGS, MEALS, BOAT AND EQUIPMENT STORAGE, REGATTA FEES, ETC.
2. ALL ANCILLARY SERVICES USUALLY FOUND IN A NEARBY COMMUNITY — LAUNDRIES, DAYCARE, PROVISIONS STORES AND SHOPS, RESTAURANT, ENTERTAINMENT, ETC.
3. A FULL RANGE OF RECREATIONAL, EDUCATIONAL AND CULTURAL EVENTS/AMENITIES FOR THE SAILORS, COMMUNITY AND REGION.
4. A PROFESSIONALLY MANAGED RACING PROGRAM UTILIZING UP TO DATE METHODS AND EQUIPMENT.

TO BE VIABLE, IT MUST ALSO APPEAL TO THE PUBLIC, DRAWN BY A WIDE RANGE OF WELL ADVERTISED OPPORTUNITIES FOR RECREATION, EDUCATION AND ENTERTAINMENT.

THE SPECIFIC, PURPOSEFUL EVENT OF RACING SERVES AS A FOCUS AND A PRIME GENERATOR FOR THE OTHER ACTIVITIES, BUT IT DOESN'T PREEMPT THEM. EXPERIENCE DURING THE FIRST TWO YEARS OF THE PROTOTYPICAL CENTER'S OPERATION HAS SHOWN THAT, PREDICTABLY, PROGRAMS LIKE THEATER, ART EXHIBITIONS AND STUDIOS, FOLK DANCING, COMMUNITY EDUCATIONAL SEMINARS, BOY SCOUT ACTIVITIES, ETC., CAN OCCUR COINCIDENTLY WITH THE REGATTA PROGRAMS. SAILORS ARE OFTEN THE MAJOR PARTICIPANTS IN THESE EVENTS.

THE SAILING CENTER DOES NOT COMPETE DIRECTLY WITH YACHT CLUBS. SAILORS USING THE FACILITY DO SO ONLY PERIODICALLY FOR THE LARGER REGATTAS THE CLUBS CAN'T PROPERLY MANAGE. THE CENTER SHOULD RELIEVE THE STRAIN OF HOSTING HUGE REGATTAS FROM THE SHOULDERS OF THE FREQUENTLY UNABLE AND INEPT YACHT CLUBS. THESE CLUBS WILL STILL SUPPORT THEIR OWN RACING PROGRAMS, AND THEY WILL CONTINUE TO BE SUPPORTED BY THEIR OWN WIDELY VARIED EVENTS AND THE DUES OF THEIR IMMENSELY RELIEVED MEMBERSHIPS.

IT'S CONCEIVABLE THAT THERE COULD BE SEVERAL SAILING CENTERS IN AMERICA. IN THE LIGHT OF THE ENERGY CRISIS, THIS SPORT, WHICH REQUIRES NO ENERGY CONSUMPTION, IF ONE BICYCLES TO THE YACHT CLUB, AND REQUIRES NO ENERGY CONSUMPTION IN AND OF ITSELF, CAN DO NOTHING BUT GROW. THE NEED FOR SAILING CENTERS WILL INCREASE. ONE DAY THERE MAY BE A CENTER WITHIN 200 MILES OF EVERY SAILOR IN THE UNITED STATES.
The first official act of the new One-Design Class Council was to express a unanimous, unconditional support for continued operation of the North American Sailing Center at Association Island.

The first sub-committee formed and the first task undertaken by this new body representing the voice of the one-design sailor were aimed at immediate efforts to help in the overall North American Yacht Racing Union campaign to raise a fund which would both underwrite a potential 1975 deficit operation and, more important, to support a capital improvement program. The latter would upgrade some of the more primitive aspects of the existing cabins and washrooms, improve the launching area and otherwise modernize the 60-year-old, Chautauqua-like facility.

Last year, its first as a sailing center, Association Island operated at a deficit of something over $15,000. The North American Yacht Racing Union, operator of the facility, absorbed that deficit but cannot do so in the future, Harry Anderson, executive director of NAYRU said.

Thus, the continuing operation of this magnificent regatta site is in doubt.

"We can't let this place slip through our fingers." Charles Wardwell, the discoverer and leader in acquisition of the facility, said to council delegates. "Where else could we find a 60-acre island on nearly perfect sailing waters handed to us on a silver platter? The trustees will give it to us, along with the mortgage, of course, if we want to take it.

"All it needs to be self-supporting is it exists now is for us to spend some of the money we already spend at motels on the regatta circuit at Association Island, instead."

In its first year of operation, and despite the late announcement of its availability for regattas, the island was utilized about 8,000 "man days;" that is, 2,000 sailors may have spent 4 days each at the island.

Twelve to fourteen thousand "man days" would permit a break-even operation and any use over that level up to the island's present capacity of 40,000 "man days" in an 80-day season would generate a surplus of income for reinvestment in capital improvements, mobile training and race management crews spawned at the island and fanning out over the country, and possibly

"Association Island... is within a day's drive of nearly half the population of the continent."

Assisting the establishment of similar sailing centers in other parts of the continent.

Association Island and the waters surrounding it are as nearly perfect for round-the-buoys racing as one is likely to find anywhere on the continent:

- During the 1974 season, only one day of racing was lost due to lack of wind.
- Shore terrain is low and causes little deflection of offshore breezes. Further, there are no large towns or cities nearby to cause intense thermals which would cause erratic distortions of prevailing winds.
• There’s rarely a perceptible current and practically no shipping or other traffic to cause confusing wash and wakes.

• From launch area to race course area is a short sail so more racing and less “commuting” is possible every day than in many other major regatta sites.

Similarly, race committee and general race management services are as close to perfect as one is likely to find.

The staff, equipment and race committee boats available at Association Island are sufficient to run expertly three regattas on three separate race courses simultaneously. The staff people are thoroughly trained in standardized procedures and vary those procedures only as individual class rules demand.

"In its first year of operation . . . the island was utilized about 8,000 ‘man days’ . . . Twelve to fourteen thousand ‘man days’ would permit a breakeven operation . . ."

Bill Bentsen, executive director of NAYRU’s class racing activities, said, "It gets more difficult every year for class officers to find yacht clubs that are both willing and able to be hosts for major regattas. If you’ve been through it, you know what I’m talking about. There are no more than a half dozen or so dozen clubs in the country that are able to do a first class job of providing good sailing and fair competition.

"Most of these clubs are in urban areas where the cost of housing and food are very much higher than at Association Island, which often means that you spend a good part of the regatta time traveling back and forth from motel to yacht club for changes of clothes and showers, spreading sails out to dry in your room and having very little time to mingle with other sailors at the regatta.

"At Association Island, you can turn the engine of your car off when you get there and not start it again until it’s time to load your boat on its trailer when you start home."

Right, skippers’ meeting before the race. In addition to basketball courts facilities for volleyball, tennis and shuffleboard are available.
Association Island
The North American Sailing Center

continued

For non-sailing wives, children and others who may accompany the sailors, there’s good swimming and other recreational facilities on the island and a great deal of history, antiques and scenery within short day-trip distances of the island. There are also more luxurious accommodations available short distances from the island for those who prefer them.

But it’s not entirely a paradise, Bentzen pointed out:

“We may have misled some of the people who used the facilities last year on what to expect. The cabins are not in immaculate shape, there are holes in some of the screens, the shower and toilet facilities are a little bit primitive and the launch area is sometimes crowded. In the experience of some sailors, reality was different from expectations. Early in the season the food wasn’t very good, but that soon improved to very good.”

Association Island, though far up in the northeastern quadrant of the United States, is within a day’s drive of nearly half the population of the continent.

“At Association Island, you can turn the engine of your car off when you get there and not start it again until it’s time to . . . start home.”

That may be little comfort to sailors in San Diego, San Francisco and Vancouver but there’s a logic to starting tax centers in other parts of the country when possible.

The Executive Committee of NAYRL, through its class racing committee, essentially asked the One-Design Class Council delegates three questions:

1) If a lot of hard work by a lot of otherwise busy people is invested in a major fund raising drive to support and improve Association Island, will the classes make a corresponding effort to use it as a regatta site?

2) If it must be operated in 1978 with only minor improvements, with major renovation to come gradually in the future, will the classes bear with us patiently?

3) Will the classes join us in the effort to put the North American Sailing Center on a sound, permanent financial base?

Loud, clear and unanimously, the answer was “Yes!”

Scores of fund raising ideas were offered and Larry Lewis, president of the 470 Class, was named chairman of a council committee to gather and implement as many as possible.

Below, the lagoon.
For example, the bars are down, now, on commercial sponsorship of yachting activity in the United States. This represents radical change in earlier, more conservative NAYRU policies.

One wit suggested, "Why don't we make a pitch for funds to establish a "Canada Dry Sailing Area" at the island?"

Such a contribution, incidently, would be welcome and entirely within NAYRU's new guidelines.

It was announced that the Winnelka Golf Yacht Club had already pledged $100 to any fund the Council might establish.

"Association island and the waters surrounding it are as nearly perfect for round-the-buoys racing as one is likely to find anywhere on the continent."

The 470 Class has provisionally enacted a "tax" of $2 on each boat sailing in a regional championship regatta during 1975 and that tax is expected to generate approximately $2,000 for the fund.

Lewis' committee, in a preliminary discussion, planned direct appeals to individual one-design sailors, to fleets, national class organizations, yacht clubs with strong one-design sailing programs, as well as to commercial organizations.

Yachting Racing Magazine too, supports the drive and will make any practical contributions we can to assist Lewis' committee.

We believe that the North American Sailing Center will not only provide magnificent one-design racing at its Lake Ontario site, but it will generate and radiate new services and standards of training and race management to all sailors, no matter how far distant.

We urge that you examine your own, your fleet's, class' and club's ability to contribute, then contact:

Larry Lewis, Chairman
Association Island Committee
P.O. Box 169
Pewaukee, Wis. 53072
Tel.: (414) 691-3690
USER NEEDS - 1

CONSUMERS:

I SAILORS: (SPECIFIC CONSUMERS WITH PREDICTABLE NEEDS)

A. VEHICULAR MOVEMENT:

1. THE WAY TO THE CENTER MUST BE MARKED WITH SIGNAGE FROM INTERSTATE 81 EXITS AT WATERTOWN AND ADAMS (RTE. 173). LANGUAGE TO BE UNIVERSELY UNDERSTOOD AND GRAPHIC.

2. THE CAUSEWAY TO THE ISLAND MUST BE WIDENED AND SMOOTHED.

3. THERE MUST BE AN ENTRY AREA BEYOND WHICH UNAUTHORIZED VISITORS CANNOT PROCEED, AND A TURN-AROUND MUST BE PROVIDED FOR THEM. AT THIS POINT THERE SHOULD BE AMENITIES FOR ALLOWING THE SAILORS TO CHECK-IN AND RECEIVE THEIR KEYS AND PERTINENT INFORMATION. PARKING FOR FOUR VEHICLES WITH 24' TRAILERS SHOULD BE PROVIDED IN BOTH DIRECTIONS.

4. OWNERS OF THE LARGER BOATS (KEELBOATS, PRIMARILY) WILL BE DIRECTED TO AN AREA WHERE THE VEHICLE AND TRAILER CAN BE PARKED FOR AN HOUR WHILE THE BOAT IS PREPARED FOR LAUNCHING. SPACE SHOULD BE PROVIDED FOR 20 AT THIS POINT, AND SHOULD BE LOCATED NEAR THE HOIST. VEHICLE AND TRAILER WILL BE PARKED IN A REMOTE AREA AT THE END OF THE HOUR.

5. THE EQUIPMENT ASSOCIATED WITH THE BOAT SHOULD HAVE A LOCKER NEAR THE AREA WHERE THE BOATS ARE RIGGED.

6. OWNERS OF THE LIGHTER AND SMALLER BOATS WILL BE DIRECTED FROM THE ENTRY POINT TO A DROP-OFF POINT WHERE THE GEAR IS UNPAID, LOADED IN THE BOAT AND THE TRAILER UNHITCHED. THE VEHICLE IS REMOVED TO A PARKING AREA WHILE THE TRAILER IS TAKEN TO THE BOAT HANDLING AREA.

7. LUGGAGE REMOVAL SHOULD OCCUR AT DROP-OFF POINTS CENTRAL TO THE LODGINGS, TURNING RADII SHOULD ALLOW FOR VEHICLES WITH 24' TRAILERS.

8. VEHICLES WILL BE ALLOWED TO REMAIN AT THE CAMPING AREA.

9. PARKING WILL BE PROVIDED FOR:
   I  300 AUTOMOBILES WITHOUT TRAILERS
   II  60 KEELBOAT (24') TRAILERS
   III 20 MOTORHOMES WITH ELECTRICAL HOOK-UPS ON METERS AND A SEWAGE DISPOSAL STATION NEARBY.
USER NEEDS - 2

CONSUMERS:

1 SAILORS:

B. LODGING:

1. SLEEPING AREAS FOR 500: DIVIDED INTO SPACES WHERE FOUR PERSONS CAN STORE THEIR CLOTHES SECURELY AND CAN SLEEP SOUNDLY: PARTITIONING TO ALLOW TWO BEDS TO BE VISUALLY SEPARATED FROM THE OTHER TWO SHOULD BE POSSIBLE. ADEQUATE VENTILATION IS NECESSARY, BUT SECURITY FROM STORM WINDS SHOULD BE PROVIDED. NO AIR CONDITIONING. NON-WINTERIZED. POSSIBLE COLLAPSIBLE SPACE.

2. TOILET AND BATHING FACILITIES NEAR THE SLEEPING AREAS AND DESIGNED TO TO SERVE A MINIMUM OF 24 SLEEPING ROOMS AT 50% OCCUPANCY TO A MAXIMUM OF 75 ROOMS AT 50% OCCUPANCY. PROBABLY PERMANENT SPACE.

3. NEAR THE TOILET FACILITIES THERE SHOULD BE LAUNDRY AND VENDING MACHINES AS WELL AS PUBLIC PHONES.

4. A LIVING AREA/RECREATION AREA SHOULD BE POSSIBLE WHEREEVER NODAL POINTS OCCUR.

5. VIEWS TO THE BOAT HANDLING AREA AND TO THE CENTER SHOULD BE HIGHLIGHTS.

6. THE CAMPING AREA:
   1. SPACE FOR 30-50 5'X12' TENTS WITHOUT SPECIFIC SPACE DESIGNATIONS TO ALLOW WELL-USED SITES TO REGENERATE GRASS.
   11. A BAT-HOUSE/LAUNDRY/VENDING FACILITY NEARBY
   111. PARKING OF CARS RESTRICTED TO SPACES PROVIDED,

C. BOAT HANDLING AREAS:

1. CENTERCAMP/LIGHTWEIGHT BOATS:
   1. PARKING FOR 300 TRAILERS AND BOATS PROVIDED ON GRASSY LAWN. THIS AREA TO BE USED FOR MANY FUNCTIONS BESIDES TRAILER STORAGE. I.E., REPAIR, SAIL MEASURING AND FOLDING, FRISBEE, ETC.
   11. PAVING IN AREAS NEAR THE LAUNCH RAMPS AND THE HOISTS WHERE GRASS WOULD SOON TURN TO MUD. THE LAUNCH RAMPS SHOULD BE REINFORCED CONCRETE SLABS EXTENDING TO WHERE THE BOTTOM DEPTH EQUALS 245' ABOVE SEA LEVEL.
   111. A MINIMUM OF TWO HOISTS ARE REQUIRED AND SHOULD BE LOCATED IN A SHIELDED AREA WHERE THE WATER IS CALM AND AT LEAST 4' DEEP.
   1111. TOTAL RACKAGE SHOULD AMOUNT TO 480 LINEAR FEET IN THE FORM OF 12-48'X8' TEMPORARY DOCKS PLACED UPWIND OF THE HOIST AREAS.
USER NEEDS - 3

CONSUMERS:

I. SAILORS:

C. BOAT HANDLING AREAS:

1. CENTERBOARD/LIGHTWEIGHT BOATS: (CONTINUED)
   VI. EQUIPMENT STORAGE LOCKERS SHOULD BE PROVIDED BETWEEN THE LAUNCHING AREAS AND THE TRAILER STORAGE AREA. THESE LOCKERS SHOULD BE SHELTERED FROM THE WINDS AND SUN IN SUMMER AND THE NORTHERLY WINDS IN WINTER.
   V. NODAL POINTS NEAR THE LOCKERS SHOULD BE PROVIDED FOR MEETINGS.
   WEATHERPROOFED BULLETIN BOARDS USUALLY SERVE AS FOCAL POINTS FOR THESE GATHERINGS.
   VI. DRINKING FOUNTAINS WILL BE PLACED NEAR THE LAUNCH AREAS.

D. THE CENTER:

1. A GENERAL INFORMATION AND EQUIPMENT CHECK-OUT POINT WHERE A LINK CAN BE MADE WITH THE MANAGEMENT OF THE FACILITY.
2. SPACES FOR BANQUETS/AWARDS DINNERS TO OCCUR:
   I. NO MORE THAN THREE BANQUETS WOULD BE SCHEDULED AT ANY ONE TIME, AND THE SIZE OF THESE VARIES FROM 50 TO 350 PEOPLE. THE CAFETERIA LINE IS A MAJOR SOCIALIZING EVENT AND IS EXPECTED. THE BAR SHOULD BE AN ADJACENT SPACE.
   II. AMENITIES SHOULD BE PROVIDED FOR VISUAL AIDS AND ENTERTAINMENT.
   III. BANQUET GUESTS SHOULD BE ABLE TO WALK OUTSIDE AND EXPERIENCE THE WIND AND WATER.
   IV. THE RACE COMMITTEE CONFERENCE ROOMS SHOULD BE NEARBY.
3. A NODAL POINT FOR THE CENTER WOULD BE ONE WHERE THE WEATHER MONITORING GAUGES AND GRAPHS AND MAPS ARE DISPLAYED. IF PROVIDED, THIS AREA WOULD RECEIVE A VISIT FROM EVERY SAILOR AT LEAST ONCE A DAY.
4. SHOPS AND STORES:
   I. A PROVISIONS STORE PRIMARILY DIRECTED TO CAMPERS WHICH SELLS FOODS AND BEVERAGES AS WELL AS OTHER ITEMS NECESSARY TO LIFE IN THE WILDERNESS.
   II. BOATING EQUIPMENT SHOP SELLING FITTINGS AND CLOTHING FOR SAILORS.
   III. A BOUTIQUE/SHOP TO SELL NON-PERISHABLE ITEMS, POSSIBILITY ARTS AND HANDICRAFTS SUPPLIES.
USER NEEDS - 4

CONSUMERS:

I. SAILORS:

D. THE CENTER:

5. AN INFIRMARY SHOULD BE PROVIDED TO CARE TEMPORARILY FOR 3 IN INITIAL TRAUMA. AN AMBULANCE WILL REQUIRE 25 MINUTES TO REACH THE CENTER FROM WATERTOWN. HVAC SYSTEM REQUIRED.

6. A CHILD CARE CENTER SHOULD BE PROVIDED TO CARE FOR 50, AGES 2 TO 10.

7. RECREATIONAL PROVISIONS:
   I. SPORTS LIKE TENNIS, SOFTBALL, VOLLEYBALL, BASKETBALL AND FOOTBALL/SOCCER ON A SMALL SCALE WITHOUT ANY ORGANIZATION TO THE CONDUCT OF THE PLAY.
   II. FOR SOME REASON, SAILING AND GOLF ARE MUTUALLY EXCLUSIVE... NO PUTTING GREEN REQUIRED.
   III. SWIMMING AND SUNNING
   IV. NATURE TRAILS INTO THE MARSH AND OUT TO THE POINT.
   V. SEVERAL OUTSIDE FIREPLACES FOR COOKING AND GATHERING.

8. A BAR SEATING 100 INSIDE AND EXPANDABLE TO EXTERIOR SPACE TO ACCOMMODATE ANOTHER 150. LIVE ENTERTAINMENT A POSSIBILITY.

9. PROVISIONS FOR CULTURE AND ENTERTAINMENT:
   I. A THEATER PRODUCTION ON A NON-BANQUET EVENING WOULD DRAW ABOUT 3/4 THE ISLAND'S POPULATION.
   II. A CONTINUING ART EXHIBITION IN THE MAJOR CIRCULATION SPACES WOULD BE APPRECIATED AND MIGHT SELL HERE.
USER NEEDS - 5

CONSUMERS:

II REGIONAL VISITORS: (THOSE REMAINING OVERNIGHT)

A. VEHICULAR MOVEMENT:

1. THESE VISITORS WILL CHECK IN AND OUT AT THE ENTRY CONTROL POINT AND PROCEED DIRECTLY TO THE LUGGAGE DROP-OFF POINTS NEAR THE LODGINGS. FROM THAT POINT, THE VEHICLE WILL BE REMOVED TO THE PARKING AREA.
2. THESE VEHICLES DO NOT HAVE BOAT TRAILERS ATTACHED, NORMALLY, BUT IF SO, THE PROCEDURE IS THE SAME AS IT IS FOR SAILORS.

B. LODGING:

1. VISITORS STAYING OVERNIGHT WILL USE THE SAME LODGINGS AS SAILORS, BUT IN THE WINTER LODGING WILL BE PROVIDED IN VACANT STAFF QUARTERS, WHICH WOULD BE WINTERIZED.

C. THE CENTER:

1. OF PRIMARY INTEREST ARE SPACES AVAILABLE FOR MEETINGS, SEMINARS AND CONFERENCES OF A PRIVATE NATURE. THESE COULD OCCUR IN SPACES WHICH SERVE OTHER PURPOSES AT OTHER TIMES, BUT SELECTIVE PRIVACY BY THE GROUPS CONCERNED IS A MUST.
2. THOSE ARRIVING BY YACHT SHOULD FIND THREE TEMPORARY BERTHS AVAILABLE TO THEM; OTHER BERTHS AND MOORINGS CAN BE FOUND AT THE NEARBY HENDERSON HARBOR YACHT CLUB.
3. IN GENERAL, ALL FACILITIES OF THE CENTER CAN BE EXPERIENCED BY THE OVERNIGHT GUESTS.
USER NEEDS - 6

CONSUMERS:

III COMMUNITY VISITORS: (THOSE ARRIVING TO ATTEND A SPECIFIC EVENT OR VISIT
THE BAR, BUT NOT TO STAY OVERNIGHT.)

A. VEHICULAR CIRCULATION:

1. VEHICLES WILL BE DIRECTED TO THE PARKING LOT. THIS LOT SHOULD BE
NEAR THE THEATER, BUT NOT NECESSARILY NEAR THE CENTER. A SHUTTLE
FROM THE CENTER IN BAD WEATHER WOULD BE EASY FOR THE STAFF TO
SUPPLY, BUT 10 MINUTES AFTER A PERFORMANCE A THEATER IS A LONELY
PLACE TO WAIT FOR SUCH THINGS.

B. THE CENTER:

1. ALL AMENITIES OF THE CENTER SHOULD BE AVAILABLE FOR USE BY THE
COMMUNITY WITH PROPER SCHEDULING OF EVENTS.
2. SOME OF THE ACTIVITIES POSSIBLE ARE:
   I SEMINARS, MEETINGS AND CONFERENCES
   II BANQUETS AND DINNERS OF ALL TYPES
   III BOY SCOUT AND YOUTH ACTIVITIES OF ALL TYPES
   IV ENTERTAINMENT AND THE BAR
   V THE BEACH, ALTHOUGH A PARK BEACH IS ON A NEARBY SHORE.
   VI ART SHOWS, DOG SHOWS, ETC.
3.
USER NEEDS - 7

STAFF:

I. MANAGERS:

A. VEHICULAR MOVEMENT: (GENERAL STATEMENTS APPLY TO ALL STAFF MEMBERS)

1. RESERVED PARKING FOR THOSE NOT LIVING ON THE ISLAND IN THE LARGE PARKING AREA.
2. PARKING ADJACENT TO THE LIVING QUARTERS NECESSARY FOR THOSE PERMANENT STAFF MEMBERS WHO LIVE ON THE ISLANDS YEAR ROUND.

B. LODGING: (GENERAL STATEMENTS APPLY TO ALL STAFF MEMBERS)

1. TWENTY STAFF MEMBERS WILL REQUIRE LODGING FOR THE SUMMER, AS WELL AS FOR THE MONTHS OF MAY AND SEPTEMBER; WINTERIZED FACILITIES ARE NECESSARY. SINCE SOME MEMBERS WILL HAVE SMALL FAMILIES, THE ROOMS SHOULD HAVE SELF-CONTAINED BATHS AND BE LARGE ENOUGH TO ACCOMMODATE THE EXTRA CLOTHES AND EQUIPMENT/PERSONAL ITEMS THEY WOULD BRING WITH THEM.
2. THESE QUARTERS SHOULD BE NEAR THE CENTER AND BECOME TEMPORARY GUEST LODGING FOR GROUPS USING THE CENTER IN THE WINTER.
3. THE MEMBERS OF THE STAFF LIVING PERMANENTLY ON THE PROPERTY MAY HAVE THEIR QUARTERS ON SNOWSHOE ISLAND IF NECESSARY.

C. THE CENTER:

1. THE CONTROL POINT FOR VEHICULAR ACCESS TO THE SITE:
   I. WILL CONTAIN ALL AMENITIES NECESSARY TO INTRODUCE THE VISITOR AND GUEST TO THE ISLAND — CHECKING IN AND OUT, MAPS AND MODEL OF THE SITE, PROGRAMS AND PAMPHLETS, ETC.
   II. SINCE SOMEONE MUST BE HERE FOR 24 HOURS, IT COULD BE ADJACENT TO THAT PERSON’S LIVING QUARTERS.
2. THREE SECRETARIES WOULD BE NEEDED AT PEAK PERIODS IN A SPACE WHERE THEY COULD REACH ALL OFFICEs DIRECTLY AND DEAL WITH THE GUESTS AT THE INFORMATION DESK.
3. THE INFORMATION DESK SHOULD BE LOCATED AT A MAJOR, OBVIOUS NODE IN THE CENTER. THIS IS THE PRIMARY LINK A USER HAS WITH THE MANAGEMENT.
USER NEEDS - 8

STAFF:

I MANAGERS:

C. THE CENTER:

5. ALSO NEEDED ARE TWO CONFERENCE ROOMS TO SERVE THE DIRECTORS AND THE RACE COMMITTEE.
6. THE STAFF WILL NOT MIND USING THE NEARBY PUBLIC TOILET FACILITIES.
7. THE INFIRMARY FALLS UNDER THE CONTROL OF THE STAFF, AND ACCESS TO IT IS ADJACENT TO THE ADMINISTRATIVE ELEMENT.

II WORKERS AND ORGANIZERS:

A. THE RACE COMMITTEE:

1. THE RACE CHAIRMAN NEEDS AN OFFICE WHICH WILL DOUBLE AS A CONFERENCE ROOM. IT IS A STAFF ROOM, IN EFFECT, WITH COMMUNICATIONS TRANSMITTER, WEATHER MONITORS, FILES, BOOKCASES, MAPS AND CHARTS, ETC..
2. THE POWERBOAT MOORING AREA REQUIRES:
   I. BERTHS IN SHELTERED WATER FOR 3 COMMITTEE BOATS < 40' LWL.
   II. MOORINGS FOR 6 OUTBOARDS < 20' LWL.
   III. EQUIPMENT STORAGE (SECURE) FOR RADIOS, STARTING GUNS, SHAPES, FLAGS, MARKER BUOYS, LIFE JACKETS, ETC., NEAR THESE MOORINGS.
   IV. SEPARATE BERTH FOR FUELING THE CRAFT. TO HAVE A MARINE PUMP FOR EACH FUEL NEEDED AND NECESSARY UNDERGROUND TANKS. TRUCK ACCESS TO THE FILLER PIPES.

B. THE FOOD PREPARATION PERSONNEL:

1. ADEQUATE FACILITIES TO ALLOW EFFICIENT PREPARATION OF SERVING LINES FOR 500 IN THREE SEPARATE AREAS.
2. AN OFFICE FOR THE MANAGER AS WELL AS A SMALL LOUNGE FOR THE COOKS AND RUNNERS. THERE SHOULD BE COMMUNICATION LINK BETWEEN THE MANAGER AND THE RACE COMMITTEE ON THE COURSES.
3. THE LINEN STORAGE AREA AND LINEN LAUNDRY SHOULD BE NEAR TO MINIMIZE THE EFFORT NECESSARY TO SERVICE THE BANQUET AREAS.
4. DELIVERY AND TRASH/GARbage COLLECTION SHOULD BE UNOBTRUSIVE TO THE
USER NEEDS - 2

STAFF:

II WORKERS AND ORGANIZERS:

B. THE FOOD PREPARATION PERSONNEL:

4. USERS BUT IN PROXIMITY TO THE FOOD PREPARATION AREA. AS A RULE, THE FOOD PANTRY, COOLER AND GARBAGE CAN WASHING AREA ARE ADJACENT TO THE TRUCK DOCK.

C. GUEST SPEAKERS, ARTISTS, EDUCATORS, EXTRA PROGRAM MANAGERS, ETC.:

1. ANY NECESSARY OFFICE SPACE NEEDED BY THESE GUESTS WILL BE PROVIDED WITHIN THE FRAMEWORK OF THE DESCRIBED FACILITY.

D. MAINTENANCE PERSONNEL:

1. THE MANAGER IS A PERMANENT RESIDENT. HIS OFFICE IS ADJACENT TO THE MAINTENANCE FACILITY.
2. THE FACILITY CONTAINS:
   I A LARGE STORAGE AREA FOR THE TRACTORS, MOWERS, DOZER, TRUCKS AND VAN IN THE WINTER. THIS SPACE HEATED TO 60 DEGREES IN WINTER TO ALLOW REPAIR WORK WITHIN IT.
   II A MACHINE SHOP/WOOD SHOP TO ALLOW FORSEEABLE MAINTENANCE OF PLANNED FACILITIES.
   III A SUPPLY STOREROOM FOR TOOLS AND CHEMICALS.
   IV A VENDING MACHINE OR TWO FOR THE CREWS AND A TOILET.

E. JANITORIAL PERSONNEL:

1. UTILITY CLOSETS AT CENTRAL POINTS.
2. BATH/TOILET FACILITIES TO BE DESIGNED FOR EASE OF USE AND EASE OF MAINTENANCE.
FACILITY NEEDS — THE PROGRAM — 1

ENTRY-ORIENTED AMENITIES AND VEHICLE CIRCULATION NEEDS:

I SIGNAGE:

A. AT EXITS FROM INTERSTATE 81 AT ADAMS AND WATERTOWN
B. AT INTERSECTION OF RTES 3 AND 173
C. AT THE INTERSECTION OF RTE 173 AND SNOWSHOE ROAD.
D. WELCOME SIGN AT ENTRY TO CAUSEWAY.

II CAUSEWAY REPAIR:

A. WIDEN CAUSEWAY ITSELF TO 16' AND PROVIDE ICE PROTECTION AT BERRY.
B.

III PARKING AND ENTRY CONTROL:

A. FOR 10 CARS BELONGING TO VISITORS USING SMALL PARK AND BEACH PROVIDED
   FOR THEM NEAR THE ENTRY CONTROL POINT. 320 10 3200
B. FOR 4 VEHICLES WITH 24' TRAILERS AT ENTRY POINT OFF THE RIGHT OF
   WAY. 480 4 1980
C. ENTRY CONTROL POINT, CONTAINING CHECK DESK, SMALL WAITING AREA,
   GATE CONTROLS AND ADJACENT LIVING QUARTERS IF NOT CO-LOCATED
   WITH ADMINISTRATIVE ZONE IN CENTER. 1000 1 1000
D. DROP-OFF ZONES: 480 10 4800
   1. FOR SMALL BOATS: TO ALLOW TEN CARS AND TRAILERS AT A TIME
      TWO LANES, MINIMUM RADIUS = 42'. PAVED.
   2. FOR LUGGAGE: VARIES WITH NUMBER OF LODGINGS AND NODES.
E. GENERAL PARKING:
   1. GENERAL AUTOMOBILE PARKING ZONE(S): FOR 300 W/O TRAILERS, + 10%:
      360 300 120000
   2. KEELBOAT TRAILER PARKING FOR 24' UNITS: 360 60 21600
   3. FOR 20 MOBILE HOMES WITH ELECTRICAL HOOK-UPS: 800 20 1600
F. SEWAGE DISPOSAL STATION @ 20'X80' NEAR MOTORHOMES: 160 1 160

IV LODGINGS:

A. 500 BEDS IN 125 - 4 MAN UNITS. THERE SHOULD BE AN OPTION OF
   PARTITIONING OFF 2 BEDS IN EACH UNIT. NONWINTERIZED, 12'X16' EACH: 180 125 22500
B. 24 WINTERIZED LIVING UNITS FOR THE STAFF, EACH CONTAINING A BATH
   AT 12'X24' EACH: 286 20 5720
FACILITY NEEDS — THE PROGRAM — 2

LODGINGS:

I CONSUMERS:

A. 500 BEDS IN 125 - FOUR PERSON UNITS. OPTION OF PARTITIONING TWO BEDS FROM THE OTHERS IN EACH UNIT. COLLAPSABLE SPACE, NONWINTERIZED. 12'X16' + 20% BALCONY & OUTSIDE HALL: 180 125 22500

B. A FEW (2 - 3) GENERAL BATHING/TOILET AREAS WITHIN 200' OF MOST DISTANT LIVING UNITS. EACH TO CONTAIN AMENITIES FOR COIN LAUNDRY MACHINES (TWO WASHERS AND DRIERS PER 200 BEDS SERVED). PERMANENT SPACE, NONWINTERIZED: BTWN 1000 3 3000 AND 1450 2 3000

C. LIVING AREAS IN EACH DWELLING COMPLEX AT 1000 TO 1500 EACH: COLLAPSABLE SPACE, NONWINTERIZED: BTWN 1000 3 3000 AND 1500 2 3000

D. CAMPING AREA SET APART FROM THE CENTER WITH ITS OWN BEACH AND BATHHOUSE. SPACE FOR 30 - 50 20'X20' SITES (USE 100 USERS TO CALIBRATE FIXTURES): BTWN 400 30 12000 AND 400 50 20000

E. OPTION OF REMOVING OLD CABINS; RENOVATING THEM AND SITING ON SNOWSHOE ISLAND WITH BATHHOUSE FOR SEASON RENTALS:

II STAFF:

A. 24 LIVING UNITS, EACH CONTAINING FOUR BEDS WITH OPTION OF PARTITIONING TWO FROM THE OTHERS. WINTERIZED AND PERMANENT. BATH INCLUDED: 16'X24' EACH: 384 24 9216

THE CENTER:

I ADMINISTRATIVE ZONE:

A. SECRETARIAL AREA FOR 3 POSITIONS, OPEN TO INFORMATION AND RECEPTION COUNTER. SPORTS EQUIPMENT CHECK-OUT/IN AND STORAGE LOCKERS, PHONE TELEX AND P.A. ANNOUNCER; RADIO RECEIVER/TRANSMITTER. PUBLICATIONS CENTER (COPIER) AND STORAGE CLOSET. TWO FILE CABINETS: 470 1 470

B. DIRECTORS' AND RACE COMMITTEE'S OFFICES: 150 3 450

C. CONFERENCE ROOMS FOR 10 EACH: 150 2 300

II ENTRY "LOBBY":
**FACILITY NEEDS — THE PROGRAM — 3**

**THE CENTRE:**

**III INFIRMARY:**

<table>
<thead>
<tr>
<th>Room Description</th>
<th>Capacity</th>
<th>Hours</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Examination Room</td>
<td>150</td>
<td>1</td>
<td>150</td>
</tr>
<tr>
<td>B. Toilet - Lavatory, Toilet and Tub with Hand Assists</td>
<td>80</td>
<td>1</td>
<td>80</td>
</tr>
<tr>
<td>C. Ward - 3 Hospital Beds with Privacy Curtains; HVAC Required.</td>
<td>400</td>
<td>1</td>
<td>400</td>
</tr>
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</table>

**IV CHILDCARE:**

<table>
<thead>
<tr>
<th>Room Description</th>
<th>Capacity</th>
<th>Hours</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Play Area with Book Shelves, Lockable Wall Storage, Daybeds for 15.</td>
<td>800</td>
<td>1</td>
<td>800</td>
</tr>
<tr>
<td>B. Toilet - Lavs and Toilet Sized for Children</td>
<td>40</td>
<td>1</td>
<td>40</td>
</tr>
<tr>
<td>C. Wet Area with Sinks and Counter Storage</td>
<td>40</td>
<td>1</td>
<td>40</td>
</tr>
</tbody>
</table>

**V "LIVING AREA/LOUNGE":**

<table>
<thead>
<tr>
<th>Room Description</th>
<th>Capacity</th>
<th>Hours</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Large Space to be Associated with the lobby, downstairs restaurant and bar; A fireplace oriented space with lounge furniture</td>
<td>800</td>
<td>1</td>
<td>800</td>
</tr>
</tbody>
</table>

**VI BARS:**

<table>
<thead>
<tr>
<th>Room Description</th>
<th>Capacity</th>
<th>Hours</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Lower Bar/Lounge to serve 50 as well as the adjacent restaurant</td>
<td>600</td>
<td>1</td>
<td>600</td>
</tr>
<tr>
<td>B. Upper Bar directly serving one banquet area and indirectly serving the other</td>
<td>150</td>
<td>1</td>
<td>150</td>
</tr>
</tbody>
</table>

**VII BANQUET AREAS:**

<table>
<thead>
<tr>
<th>Room Description</th>
<th>Capacity</th>
<th>Hours</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Restaurant with direct access to food preparation and to the outside deck and adjacent bar</td>
<td>1200</td>
<td>1</td>
<td>1200</td>
</tr>
<tr>
<td>B. Banquet Hall for 150 with serving area for mobile serving buffet; direct access to upper bar and deck; indirect access to toilets</td>
<td>1500</td>
<td>1</td>
<td>1500</td>
</tr>
<tr>
<td>C. Banquet Hall for 150 with serving area for mobile buffet; indirect access to upper bar and toilets</td>
<td>1500</td>
<td>1</td>
<td>1500</td>
</tr>
</tbody>
</table>

**IX FOOD PREPARATION:**

<table>
<thead>
<tr>
<th>Room Description</th>
<th>Capacity</th>
<th>Hours</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Food Storage: Freezer, Drygoods and Beverages</td>
<td>700</td>
<td>1</td>
<td>700</td>
</tr>
<tr>
<td>B. Kitchen: Hot and Cold Food Preparation</td>
<td>400</td>
<td>1</td>
<td>400</td>
</tr>
<tr>
<td>C. Dish Pantry</td>
<td>40</td>
<td>1</td>
<td>40</td>
</tr>
<tr>
<td>D. Dish Room</td>
<td>120</td>
<td>1</td>
<td>120</td>
</tr>
<tr>
<td>E. Toilets and Locker Rooms</td>
<td>200</td>
<td>2</td>
<td>400</td>
</tr>
<tr>
<td>F. Trash Dock</td>
<td>80</td>
<td>1</td>
<td>80</td>
</tr>
</tbody>
</table>
FACILITY NEEDS — THE PROGRAM — 4

THE CENTER:

IX FOOD PREPARATION:

G. CHEF'S OFFICE  
H. LINEN STORAGE AREAS  

X SEMINAR/MEETING:

A. FOUR AREAS, EACH DIVIDED FROM THE OTHERS BY OPERABLE WALLS WHICH DOUBLE AS PROJECTION/PRESENTATION WALLS  
B. STORAGE AREAS IN EACH MEETING ROOM FOR FURNITURE AND VISUAL AIDS  
C. LOUNGE/EXHIBIT AREA WITH DIRECT ACCESS TO EACH MEETING ROOM

SHOPS:

I PROVISIONS STORE:

A. AMENITIES FOR THE STORAGE AND SALE OF FOOD AND NECESSARY ARTICLES FOR CAMPERS

II FITTINGS SHOP:

A. NECESSARY AMENITIES FOR THE SALE OF YACHTING EQUIPMENT AND CLOTHING

III BOUTIQUES: (2)

"LODGE":

I OPEN AREA:

A. LARGE, OPEN (NO EXTERIOR PARTITIONS) AREA ORIENTED TO WATER AND THE BEACH; FIREPLACE AND UNIT TO ALLOW THE WARMING OF CATERED MEALS; HARD FURNISHINGS LIKE PICNIC TABLES AND BENCHES
B. TOILETS
C. RACE COMMITTEE OFFICE - RADIO COMM AND WEATHER INSTRUMENTS
D. CONFERENCE ROOM - DIRECT TO LODGE AND OFFICE
E. STORAGE AREA — FOR RACE COMMITTEE
FACILITY NEEDS — THE PROGRAM — 5

LINEN EXCHANGE:

I LAUNDRY AREA:

A. AREA TO CONTAIN EQUIPMENT FOR WASHING AND DRYING AND STORING LINENS FOR THE ENTIRE FACILITY 750 1 750
B. DESK AREA FOR THE DISSEMINATION AND COLLECTION OF LINENS TO USERS 80 1 80

II LUGGAGE DROP-OFF/PICK-UP:

A. PARTIALLY SHELTERED ZONE FOR TEMPORARY STORAGE OF LUGGAGE; ASSOCIATED WITH THE LINEN EXCHANGE FOR SECURITY OF VALUABLES 200 1 200

MAINTENANCE:

I COVERED STORAGE AREA:

A. LARGE OPEN AREA FOR EQUIPMENT STORAGE AND REPAIR CONTAINING A 200 SQ.FT. REPAIR SHOP, 150 SQ. FT. OFFICE AND 50 SQ. FT. TOILET. 5000 1 5000

II OUTSIDE SECURE STORAGE AREA:

A. FENCED AND SCREENED (VIA CONIFERS AND OTHER PLANT MATERIALS) AREA 3000 1 3000

BOAT HANDLING FACILITIES:

I FOR ALL BOAT TYPES:

A. TRAILER DROP-OFF/PICK-UP AREA; GRAVEL PAVING WITH RAILROAD TIE EDGES 24000 1 24000
B. PAVED HOIST AREAS
C. EQUIPMENT STORAGE LOCKERS, EITHER NEAR LODGE OR ASSOCIATED WITH BREAKWATER MOORINGS
D. RETENTION OF LARGE GRASSY AREA FOR DRYSAIL STORAGE AND REPAIR AS WELL AS FOR OTHER FUNCTIONS
E. MEETING AREAS WITH BULLETIN BOARDS AND WATER FOUNTAINS NEAR PIERS
FACILITY NEEDS — THE PROGRAM — 6

BOAT HANDLING FACILITIES:

II FOR KEELBOATS, PRIMARILY:

A. PAVING AT HOISTS WITH 1000 PSI CAPABILITY
B. 2 - TWO TON HOISTS WITH ASSOCIATED TEMPORARY MOORING PIERS
C. SPACE FOR RIGGING AND STEPPING MASTS FOR 20 KEELBOATS ON THEIR TRAILERS. NO OVERHANGING TREES OR LIGHT POLES
D. BREAKWATER FOR SHELTERED MOORING OF 60 KEELBOATS, EACH 10 FT. WIDE, WITH ALLOWANCE FOR MINIMUM DEPTH OFF THE FINGER PIERS (30 IN NUMBER) OF SIX FEET

III FOR CENTERBOARD BOATS AND CATAMARANS:

A. PAVING AT HOISTS WITH 750 PSI CAPABILITY
B. 3 - ONE TON HOISTS WITH ASSOCIATED TEMPORARY MOORING PIERS
C. 

IV FOR VISITING YACHTS AND COMMITTEE BOATS:

A. SHELTERED MOORING FOR TWO COMMITTEE BOATS 8 40 FT LWL DRAWING 6 FT.
B. SAME FOR THREE 40 FT. YACHTS, ELECTRICAL HOOKUPS AND SEWAGE HOOKUP
C. FUEL PUMPS FOR GASOLINE AND DIESEL FUEL WITH ASSOCIATED UNDERGROUND TANKS
D. MOORINGS FOR 6 SMALL OUTBOARDS AT 16 FT. EACH
E. 
RECREATION AMENITIES:

I. TWO TENNIS COURTS

II. SOFTBALL FIELD

III. AREAS FOR VOLLEYBALL, BADMINTON, CROQUET, ETC.

IV. TWO OR THREE BEACHES ON SHELTERED SOUTH SHORE

V. NATURE TRAILS THROUGH THE WILDLIFE AREA AND THE MARSHES

VI. AREAS FOR FIRESIDE GATHERING IN SECLUDED AREAS

A. EACH AREA TO BE SUPPLIED WITH FIREWOOD AND FIRE BUCKETS.
THE SITE

I LOCATION:

ASSOCIATION ISLAND ON LAKE ONTARIO IS LOCATED IN THE TOWN OF HENDERSON, JEFFERSON COUNTY, NEW YORK. IT IS 25 MILES FROM WATERTOWN, 74 MILES FROM SYRACUSE AND 183 MILES FROM ROCHESTER.

IT IS ONE OF TWO ISLANDS OWNED BY THE ASSOCIATION ISLAND RECREATION CORPORATION AND THE UNITED STATES YACHT RACING UNION. ALL FACILITIES CONSIDERED FOR RENNOVATION, FOR THE PURPOSES OF THIS THESIS, ARE LOCATED ON ASSOCIATION ISLAND (60.2 ACRES). THIS ISLAND IS JOINED TO SNOWSHOE ISLAND (35.0 ACRES) BY A NARROW CAUSEWAY; SNOWSHOE IS VIRTUALLY UNDEVELOPED AND LIES ALONG THE CAUSEWAY BETWEEN ASSOCIATION ISLAND AND THE MAINLAND. A NARROW BRIDGE ON THE CAUSEWAY BETWEEN SNOWSHOE AND THE MAINLAND MARKS THE WESTERN BOUNDARY OF THE PROPERTY.

II HISTORY OF THE SITE:

THE ISLANDS ARE LISTED AS LANDMARKS BY THE STATE OF NEW YORK. HENDERSON HARBOR WAS A PRIMARY LANDING POINT OF THE EASTERN SHORE FOR A TRADE ROUTE WHICH EXTENDED FROM OTHER SHORES ON LAKE ONTARIO TO THIS BAY AND THEN INLAND TO THE MOHAWK RIVER. PRIMARY USERS OF THIS ROUTE WERE THE INDIANS IN THE 17TH CENTURY, FOLLOWED BY THE ENGLISH EXPEDITIONARY FORCES IN THE MID 18TH CENTURY. ASSOCIATION ISLAND WAS THE SITE OF A GARRISON OF A THOUSAND FRENCHMEN, AND ITS POSITION COMMANDED AN OVERLOOK OF THE TERMINATION OF THE ROUTE. IN 1756, SEVERAL NOTORIOUS RAIDS WERE STAGED FROM THIS ENCAMPMENT, CALLED CAMP DE L'OBSERVATION BY THE FRENCH, AGAINST ENGLISH FORCES AND NAVAL VESSELS WITH SOME SUCCESS.

THE FRENCH QUIETLY LEFT THE GARRISON BEFORE COLONIAL JOHN BROADSTREET PASSED THROUGH THE AREA IN AUGUST OF 1756. THOUGH THE ISLAND IS A LANDMARK FOR THE GARRISON, NO TRACE OF THE CAMP EXISTS.

IN 1788, THIS AND ALL OF NORTHERN NEW YORK WERE CEDE TO THE STATE OF NEW YORK BY THE INDIANS, AND IN 1795 THE HARBOR AND TOWN WERE NAMED BY THEIR FIRST OWNER, WILLIAM HENDERSON. BY 1810, SEVENTY FAMILIES OCCUPIED THE TOWN AND BASED THEIR ECONOMY ON SHIPBUILDING. THE ISLANDS WERE USED FOR FARMING UNTIL 1906, WHEN A GROUP OF SPORTSMEN CONCEIVED OF USING THE SITE AS A COMPANY CONFERENCE CENTER. THE COMPANY WAS TO BECOME GENERAL ELECTRIC IN 1912, AND THE CAMP BECAME MORE ESTABLISHED AND ACTIVE AS THE YEARS WENT BY. THERE WERE TENNIS COURTS, CROQUET AND BOWLING GREENS, A BOWLING ALLEY, BASEBALL FIELDS AND A FLEET OF MOTORIZED AND ROWING BOATS. SPACE FOR INDOOR RECREATION WAS PROVIDED AS WELL AS A LIBRARY, DORMATORIES FOR MAIDS AND BUTLERS AND A MAIN DINING ROOM.

BY 1928, MOST OF THE EXISTING BUILDINGS HAD BEEN BUILT. IT WAS CLOSED DURING WORLD WAR II, AND THE COMPANY SOLD IT IN 1959 TO THE NEW YORK STATE Y.M.C.A.. THE OWNER ATTEMPTED TO DEVELOP THE FACILITY FOR ITS USE, BUT COULD NOT JUSTIFY THE GREAT EXPENDITURES REQUIRED FOR
THE SITE

II  HISTORY OF THE SITE:

MAINTENANCE OF THE EXISTING FACILITIES, LET ALONE A REDEVELOPMENT OF THE TOTAL FACILITY AS SUGGESTED IN THE MASTER PLAN COMPILED BY SARGENT, WEBSTER, CRENSHAW AND FOLLEY IN THE MID 60'S.


III  SITE ANALYSIS:

A.  SUBSURFACE CONDITIONS:

THE GEOLOGICAL FORMATION OF THE ENTIRE AREA IS FROM SEDIMENTARY ROCKS, LIMESTONE OF THE ORDOVICIAN AGE.

THE SOIL IS COMPOSED OF GLACIAL TILL LOAMS, MEDIUM AND HIGH-LIME PROFILES, LOW TO MEDIUM POTASH SUPPLIERS, WITH MANY SHALLOW LIMESTONE BEDROCK AREAS. THIS IS A MOSTLY WELL TO MODERATELY WELL DRAINED SOIL (LOWVILLE, NELLIS-AMENIA). ON ASSOCIATION ISLAND, BEDROCK RANGES FROM TWO TO FOUR FEET BELOW THE SURFACE, WHILE ON SNOWSHOE, BEDROCK IS SOMewhat DEEPER, RANGING FROM FOUR TO FIFTEEN FEET BELOW GRADE. THIS CONDITION ON ASSOCIATION ISLAND SUGGESTS THAT, WHEN POSSIBLE, EXISTING UNDERGROUND CONDUIT RUNS BE USED AS OPPOSED TO CUTTING NEW RUNS THROUGH ROCK.

DRAINAGE OF SURFACE WATER, AS WELL AS INTERNAL DRAINAGE, IS ONE OF THE MORE IMPORTANT PROBLEMS TO BE CONSIDERED WHEN DEVELOPING THESE LANDS. PERMEABILITY IS MODERATE, WITH THE SOIL HAVING A GENERALLY HIGH MOISTURE SUPPLYING CAPACITY.

B.  TOPOGRAPHY:

THE LAND IS VERY FLAT — WITHIN A FEW FEET OF THE MEAN WATER LEVEL OF LAKE ONTARIO (245.0).
THE SITE

III SITE ANALYSIS:

B. TOPOGRAPHY:

ASSOCIATION ISLAND AVERAGES 250.0 FEET ABOVE SEA LEVEL WHILE SNOWSHOE ISLAND IS SOMEWHAT HIGHER OVERALL.

C. FLOOD PLAIN:

THERE IS NO OFFICIAL MEAN LOW WATER LINE ESTABLISHED BY THE STATE OF NEW YORK FOR LAKE ONTARIO. HOWEVER, THE UNOFFICIAL LINE HAS BEEN DETERMINED AS 245.0 FEET (U.S.C.G.S. DATA OF 1935) OR 243.8 FEET (INTERNATIONAL GREAT LAKES DATUM OF 1955). THESE ELEVATIONS MAY BE THE SAME, IN EFFECT, DUE TO THE SPAN OF TIME BETWEEN SURVEYS AND INSTRUMENT ERROR. THE AVERAGE WATER LEVEL OF LAKE ONTARIO IS APPROXIMATELY 246.0 FEET. THE LOWEST LEVEL ON RECORD IS 241.5 FEET, AND THE HIGHEST IS 249.0 FEET. THIS LAST FIGURE DOES NOT INCLUDE THE PERIODIC TIDES DUE TO LAKE STORMS; THESE AVERAGE AS MUCH AS 1.2 FEET MORE THAN THE WATER LEVEL.

ASSOCIATION IS THE ONLY LAND MASS SERIOUSLY AFFECTED BY HIGH WATER. ALTHOUGH 249.0 FEET IS THE HIGHEST WATER LEVEL THEORETICALLY POSSIBLE FOR EXTENDED PERIODS, ADDITIONAL WATER FROM STORM TIDES COULD INUNDATE TWO-THIRDS OF THE ISLAND. THERE HAVE BEEN SEVERAL SUMMERS WHEN THE ISLAND COULD NOT BE USED DUE TO HIGH WATER.

IV MICRO-CLIMATE:

A. WINDS:

STORMS IN THIS REGION GENERALLY MOVE FROM THE NORTHWEST IN A SOUTHEASTERLY DIRECTION, WHILE THE PREVAILING BREEZES DURING THE SUMMER ARE FROM THE SOUTH-SOUTHEAST. DURING THE 1974 SEASON, ONLY ONE DAY WAS LOST DUE TO LACK OF SUFFICIENT WIND FOR YACHT RACING.

SHORE TERRAIN IS LOW AND CAUSES LITTLE DEFLECTION OF OFFSHORE BREEZES. FURTHERMORE, THERE ARE NO LARGE TOWNS OR CITIES NEARBY TO PROVIDE INTENSE THERMAL ACTION WHICH WOULD CAUSE ERRATIC DISTORTIONS OF THE PREVAILING BREEZES.

B. TEMPERATURES AND HUMIDITY:

TYPICAL HUMIDITY IN AUGUST IS 60% WHILE THE SUMMER AVERAGE IS 60 TO 70%. NORMAL SUMMER TEMPERATURES RANGE FROM AVERAGE HIGHS BETWEEN 78° AND 84°F, TO AVERAGE LOWS BETWEEN 60° AND 64° F.. NORMAL WINTER TEMPERATURE RANGES FROM 35° TO -20°F..
THE SITE

IV MICRO-CLIMATE:

C. SOLAR ORIENTATION: SITE IS AT LAT. 43°-50' NORTH

D. PRECIPITATION AND SNOWFALL:

THE AVERAGE YEARLY PRECIPITATION IN THE HENDERSON BAY AREA IS 54 INCHES WITH A YEARLY SNOWFALL OF BETWEEN 65 INCHES TO 100 INCHES.

THE RELATIVELY HIGH PRECIPITATION ON THE AREA REQUIRES THAT ALL CONSTRUCTION MUST HAVE THOROUGH DRAINAGE AMENITIES. SURFACED AND UNSURFACED AREAS WILL HAVE TO BE READILY DRAINED BY UNDERGROUND MEANS TO THE LAKE IN ORDER TO PREVENT PONDING CONDITIONS.

V CONDITIONS OF EXISTING BUILDINGS AND UTILITIES:

A. STRUCTURAL CONDITIONS:

THE BUILDINGS ON ASSOCIATION ISLAND WERE CONSTRUCTED, WITH FEW EXCEPTIONS, MORE THAN 45 YEARS AGO. THEY WERE INEXPENSIVELY CONSTRUCTED FOR SEASONAL USE ONLY. AS A RESULT, GENERAL ELECTRIC SPENT APPROXIMATELY $200,000 TO $300,000 YEARLY IN MAINTAINING THE COMPLEX
THE SITE

V CONDITIONS OF EXISTING BUILDINGS AND UTILITIES:

A. STRUCTURAL CONDITIONS:

AT A HIGH LEVEL OF REPAIR. AS A CONTRAST, THE Y.M.C.A. ALLOTED ONLY $24,000 TO $30,000 ANNUALLY FOR MAINTENANCE. MAJOR REPAIRS HAVE LONG BEEN NECESSARY TO VIRTUALLY ALL THE STRUCTURES, MERELY TO MAINTAIN THE STATUS QUO.

THE TABLE ON THE FOLLOWING PAGE SHOWING THE STRUCTURAL CONDITIONS AND LIFE EXPECTANCIES OF ALL THE STRUCTURES ON ASSOCIATION ISLAND WAS COMPILED BY SARGENT, WEBSTER, CRENSHAW & FOLLEY TO ILLUSTRATE THE INCREASING PROBLEM OF CONTINUED USE OF EXISTING BUILDINGS.

B. HEATING CONDITIONS:

ONLY ONE BUILDING, TOWN HALL, PRESENTLY HAS A CENTRAL HEATING SYSTEM. THIS BUILDING HAS A BOILER WITH CAST IRON RADIATION. THIS SYSTEM IS INADEQUATE FOR WINTER USE AND MUST BE EXPANDED IF 12-MONTH USAGE IS PROPOSED. THE OTHER BUILDINGS PRESENT SEVERAL PROBLEMS IN ADAPTING TO ALL-WEATHER USE. SPACE FOR HEATING PLANTS CAN ONLY BE SECURED BY USING PROGRAMMED SPACE, SINCE NO UTILITY SPACES AS SUCH ARE PRESENT. ANY BUILDING DEVELOPED FOR ALL-WEATHER USE MUST BE SEALED AND INSULATED, AND FEW, IF ANY, OF THESE ARE EITHER. FURTHERMORE, A MULTIPLECTY OF UNATTENDED HEAT GENERATORS IS NOT RECOMMENDED IN THE FRAME BUILDINGS IN THE FACILITY WITHOUT SPECIAL FIRE PROTECTION AND ALARM PROVISIONS.

C. PLUMBING CONDITIONS:

THE INTERIOR PLUMBING INSTALLATIONS, WHERE PRESENT, ARE OF GOOD QUALITY, GENERALLY. INSULATION AND SOME REROUTING OF WATER AND DRAIN LINES WOULD HAVE TO BE ACCOMPLISHED TO ALLOW YEAR-ROUND USE. THE CENTRAL TOILET AND SHOWER FACILITIES IN THE CAMPING AND FAMILY AREAS, WHILE ADEQUATE, SUFFER BY COMPARISON WITH MORE MODERN FACILITIES.

D. WATER SYSTEM:

THE EXISTING PUMP HOUSES FOR BOTH THE WATER AND SANITARY FACILITIES WERE FROZEN SHUT DURING THE INSPECTION BY SARGENT, WEBSTER, CRENSHAW & FOLLEY ENGINEERS FOR THEIR REPORT, AND NO COMMENT IS POSSIBLE ON THE CAPACITY OR CONDITION OF THE EQUIPMENT BY THIS RESEARCHER.

THE EXISTING WATER SUPPLY FOR ASSOCIATION ISLAND IS DISTRIBUTED BY A PNEUMATIC SYSTEM PUMPING STATION, TREATMENT AND STORAGE FACILITIES AND INTAKE FROM THE LAKE ON THE WEST SHORE OF THE ISLAND.
## Table 1

**Structural Conditions and Life Expectancy of Buildings on Association Island**

<table>
<thead>
<tr>
<th>Structure</th>
<th>Structural Condition</th>
<th>Life Expectancy</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dining Hall</td>
<td>Fair</td>
<td>8 to 10 years</td>
<td>Roof trusses and floor repairs are required. Truss repairs are required to prevent development of roof leaks.</td>
</tr>
<tr>
<td>Administration Building</td>
<td>Good</td>
<td>10 to 15 years</td>
<td>Extensive repair required to perimeter. Retaining walls of boat basin.</td>
</tr>
<tr>
<td>Boat House</td>
<td>Good</td>
<td>10 to 15 years</td>
<td>Building has been salvaged thru extensive repair and alterations. Continued above average maintenance can be expected.</td>
</tr>
<tr>
<td>Island House</td>
<td>Good</td>
<td>10 to 15 years</td>
<td>Building has been salvaged thru extensive repair and alterations. Continued above average maintenance can be expected.</td>
</tr>
<tr>
<td>Tom Catte</td>
<td>Fair</td>
<td>8 to 10 years</td>
<td>Building has been salvaged thru extensive repair and alterations. Continued above average maintenance can be expected.</td>
</tr>
<tr>
<td>Black Catte</td>
<td>Fair</td>
<td>8 to 10 years</td>
<td>Building has been salvaged thru extensive repair and alterations. Continued above average maintenance can be expected.</td>
</tr>
<tr>
<td>Service Area</td>
<td>Fair</td>
<td>5 to 10 years</td>
<td>Building has been salvaged thru extensive repair and alterations. Continued above average maintenance can be expected.</td>
</tr>
<tr>
<td>Town Hall</td>
<td>Good</td>
<td>20 to 25 years</td>
<td>Building has been salvaged thru extensive repair and alterations. Continued above average maintenance can be expected.</td>
</tr>
<tr>
<td>Kade Cottage</td>
<td>Fair</td>
<td>8 to 10 years</td>
<td>Building has been salvaged thru extensive repair and alterations. Continued above average maintenance can be expected.</td>
</tr>
<tr>
<td>New Cottages</td>
<td>Good</td>
<td>20 to 25 years</td>
<td>Building has been salvaged thru extensive repair and alterations. Continued above average maintenance can be expected.</td>
</tr>
<tr>
<td>Ontario Towns</td>
<td>Good</td>
<td>15 to 20 years</td>
<td>Building has been salvaged thru extensive repair and alterations. Continued above average maintenance can be expected.</td>
</tr>
<tr>
<td>Southwest Area 1-22</td>
<td>Poor</td>
<td></td>
<td>These structures appear to have required extensive alteration and maintenance over a period of years. This can be expected to continue if it is desired to keep these structures in service.</td>
</tr>
<tr>
<td>Family Row 1-30</td>
<td>Poor</td>
<td></td>
<td>These structures appear to have required extensive alteration and maintenance over a period of years. This can be expected to continue if it is desired to keep these structures in service.</td>
</tr>
<tr>
<td>Association Lane 2-170</td>
<td>Poor</td>
<td></td>
<td>These structures appear to have required extensive alteration and maintenance over a period of years. This can be expected to continue if it is desired to keep these structures in service.</td>
</tr>
</tbody>
</table>
THE SITE

V. CONDITIONS OF EXISTING BUILDINGS AND UTILITIES:

D. WATER SYSTEM:

THE STORAGE FACILITIES, AT PRESENT, CONSIST OF ONE 2,500 GALLON TANK FOR POTABLE WATER AND ONE 800 GALLON TANK FOR FIRE PROTECTION. THE INTAKE PIPE REACHES APPROXIMATELY 400 FEET OUT INTO THE LAKE WHERE THE DEPTH OF THE WATER IS ABOUT FOUR OR FIVE FEET.

ALTHOUGH THE EXISTING WATER DISTRIBUTION SYSTEM MAY BE ADEQUATE FOR THE PRESENT OPERATION OF THE ISLAND, IT WILL NOT SUFFICE FOR ANY EXPANDED OR INTENSIFIED OPERATION. STORAGE FACILITIES ARE TOO SMALL. THE INTAKE SCREEN REQUIRES EXTENSIVE MAINTENANCE DUE TO ITS SHALLOW DEPTH.

E. SANITARY SYSTEM:

THE SANITARY SYSTEM IS COMPOSED OF A SERIES OF SEPTIC TANKS WHICH REMOVE SOLIDS AND A CHLORINE CHAMBER ON THE NORTH SIDE OF THE ISLAND INTO WHICH THE EFFLUENT IS PUMPED BY A LIFT STATION LOCATED NEARBY. FROM THIS TREATMENT TANK THE WATER IS PUMPED INTO THE LAKE AND CONSIDERED AT PRESENT TO BE POTABLE AT THAT POINT.


F. THE ELECTRIC SYSTEM:

THE ISLAND SECURES ITS POWER FROM A 4800 VOLT, THREE PHASE-OVERHEAD LINE OF THE ADAMS ELECTRIC LIGHT COMPANY. SECONDARY SERVICE IS TAKEN AT 480 Volts, THREE PHASE, FROM POLE-MOUNTED TRANSFORMERS, CONSISTING OF ONE 25 KVA AND ONE 10 KVA PARALLELED FOR EACH PHASE, FOR A TOTAL CAPACITY OF 105 KVA.

SECONDARY POWER IS DISTRIBUTED FROM A METALLIC ENCLOSED SWITCHGEAR IN THE "POWER HOUSE". A 200 KVA DIESEL GENERATOR IS AVAILABLE FOR EMERGENCY POWER, UTILIZING MANUAL TRANSFER SWITCHING. DISTRIBUTION IS GENERALLY UNDERGROUND, BUT IS OVERHEAD IN SOME AREAS WHERE POTENTIAL HAZARDS TO USERS EXIST (BETWEEN VIRTUALLY ALL THE CABINS TO THE EAST OF THE LODGE). STEP DOWN TRANSFORMERS, PROVIDING EITHER 120/208 VOLTS, THREE PHASE, FOUR WIRE, OR 120/290 VOLTS, SINGLE PHASE, THREE WIRES, ARE USED TO SECURE VOLTAGE FOR LIGHTING.

INTERIOR WIRING IN THE MAJORITY OF THE BUILDINGS CONSISTS OF A COMBINATION OF FLEXIBLE METALLIC CABLE (BX), NON-METALLIC SHEATHED CABLE (ROMEX) AND METALLIC PIPING SYSTEM (EMT),
THE SITE

V CONDITIONS OF EXISTING BUILDINGS AND UTILITIES:

F. THE ELECTRIC SYSTEM:

THE ELECTRIC SYSTEM, GENERALLY, IS TYPICAL OF A COMPLEX WHICH HAS GROWN WITH NO OVERALL PLANNING OF THE SYSTEM. THERE HAS BEEN A CONTINUED EFFORT TO IMPROVE AND UPDATE IN RECENT YEARS, AS EVIDENCED BY NEW WIRING AND EQUIPMENT VISIBLE. THE GENERAL SYSTEM, HOWEVER, IS ANTIQUATED AND INADEQUATE FOR ANY EXPANSION. SEVERAL HAZARDOUS FEATURES EXIST, SUCH AS EXTERIOR POLE TRANSFORMERS, LOCATED WITHOUT ADEQUATE PHYSICAL PROTECTION, LACK OF EQUIPMENT GROUNDS ON NON-METALLIC WIRING SYSTEMS AND INSUFFICIENT CLEARANCE ON OVERHEAD WIRES.

VI SUMMARY OF THE SITE OPPORTUNITIES, LIMITATIONS AND CONTRADICTIONS:

<table>
<thead>
<tr>
<th>SNOWSHOE ISLAND</th>
<th>ASSOCIATION ISLAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEEPER ROCK BETWEEN 4 AND 15 FEET BELOW GRADE</td>
<td>SHALLOW ROCK BETWEEN 2 AND 4 FEET BELOW GRADE</td>
</tr>
<tr>
<td>MINIMAL LOSS OF USABLE LAND AREA DURING STORM TIDE CONDITIONS</td>
<td>DEPENDING ON THE SEASONAL WATER LEVEL UP TO 2/3 RDS OF THE USABLE LAND MAY BE INUNDATED</td>
</tr>
<tr>
<td>VIRTUALLY UNDEVELOPED</td>
<td>ALL FACILITIES ARE ON THIS ISLAND</td>
</tr>
<tr>
<td>LARGE TREES AROUND THE SHORELINE</td>
<td>SEVERAL NOTABLE TREES ON THE SOUTHWEST SIDE AS WELL AS A WELL DEFINED COLONNADE OF BEECH MAPLES</td>
</tr>
<tr>
<td>NOISE FROM ANY DEVELOPMENT ON THIS ISLAND MAY BE OFFENSIVE TO THE NEARBY SHORE COMMUNITY</td>
<td>NOISE FROM ACTIVITIES HERE IS NOT OFFENSIVE TO NEARBY COMMUNITY</td>
</tr>
<tr>
<td>A MORE PUBLIC, LESS SECLUDED PLACE</td>
<td>THE END/TERMINUS — PRIVATE SPACE</td>
</tr>
<tr>
<td>RACE COURSES ARE FURTHER AWAY BY 1/2 MILE</td>
<td>SHORTEST DISTANCES FROM LAUNCHING AREA TO RACE COURSES</td>
</tr>
<tr>
<td>CONSTRUCTION MUST OCCUR IN ONE STEP AND BE TOTALLY COMPLETE BEFORE OCCUPATION; CENTER CANNOT BE SPLIT BY DISTANCE BETWEEN ISLANDS</td>
<td>PHASED CONSTRUCTION MUST OCCUR HERE TO ALLOW MINIMUM IMPACT UPON OPERATIONS AND REUSE OF SITES</td>
</tr>
<tr>
<td>STRONG POTENTIAL FOR USE AS FARMLAND</td>
<td></td>
</tr>
</tbody>
</table>
VI SUMMARY OF THE SITE OPPORTUNITIES, LIMITATIONS AND CONTRADICTIONS:

A. FOR THE CENTER ON ASSOCIATION ISLAND:

NORTHWEST STORM WINDS IN ALL SEASONS SUGGEST BUILDINGS TO BE LOCATED TO CENTRAL AND SOUTHERN AREAS OF THE ISLANDS. MOORING, LAUNCHING AND STORAGE AREAS FOR BOATS SHOULD BE ON THE SOUTHERN SHORE.


NEED FOR A MAINTENANCE-FREE CONSTRUCTION SYSTEM UTILIZING SIMPLE, INEXPENSIVE AND DURABLE MATERIALS.

A LOW PROFILE OF BUILDINGS WILL PRESERVE THE REGIONAL CHARACTER OF THE ARCHITECTURE AND AID IN KEEPING THE SCALE OF THE DEVELOPMENT DOWN.

IN KEEPING WITH THE TRADITION OF INFORMALITY FOR ALL ACTIVITIES AND AMENITIES ON THE ISLAND, THE ARCHITECTURE SHOULD BE SIMPLE IN CHARACTER, AND ALL PAVED SURFACES AND WALKING SURFACES SHOULD BE COMFORTABLE FOR THOSE IN BARE FEET.

SOIL AND DRAINAGE CONDITIONS DEMAND PIER FOUNDATIONS FOR ALL STRUCTURES; NO CONTINUOUS SLABS ARE POSSIBLE.
CONCEPTS:

I  FUNCTIONAL:

A. THE OLYMPIC VILLAGE: PRIMARILY CONTROLS DWELLING DESIGN AND ENVIRONMENT

LIKE AN OLYMPIC VILLAGE, THE SAILING CENTER IS A FACILITY FOR LODGING COMPETITORS AND PROVIDING FOR THEM AN ENVIRONMENT SUITABLE FOR ALLOWING THESE SPECIAL PEOPLE TO RELAX TOGETHER APART FROM THE INTENSITY OF THE SPORT. THE UNITS ARE EQUAL IN THEIR APPOINTMENTS AND ACCOMMODATIONS — FOUR BEDS EACH, IN THIS INSTANCE — BUT ALLOW USE BY THE SEVERAL TYPES OF COMPETITORS PROBABLE IN YACHTING: SINGLES, COUPLES, FAMILIES OR NUMBERS OF THE SAME SEX. WITHIN A SHORT DISTANCE OF THE INDIVIDUAL CABIN SHOULD BE THE OUTDOOR RECREATION AND PICNIC AREAS, BOAT STORAGE AND THE BATHHOUSE.

B. THE RESORT HOTEL: PRIMARILY CONTROLS DESIGN OF THE MANAGEMENT NEEDS AND TO THE SCOPE OF POSSIBLE AMENITIES FOR THE SITE OUTSIDE THOSE SERVING THE YACHTING SCENE.


LIKE A RESORT HOTEL, THE CENTER ENCOURAGES THE USER TO FORGET THE AUTOMOBILE AND THE OUTSIDE WORLD. EVERYTHING IS SELF-CONTAINED HERE, AND THE CAR IS ONLY THE MEANS FOR ARRIVING AND LEAVING. IT WILL BE PHYSICALLY REMOVED BUT SECURE AND NEAR, IF POSSIBLE TO THE BOAT STORAGE AREA.

C. THE YACHT CLUB: PRIMARILY FOR THE UNDERSTANDING OF THE NEEDS OF SAILORS AND BOAT HANDLING AMENITIES.

THE SAILING CENTER IS A YACHT CLUB WITHOUT A FLEET OR PERMANENT MEMBERSHIP TO SUSTAIN IT. IT MUST PROVIDE FACILITIES FOR THE CONDUCTING OF THE RACING PROGRAM IN A PROFESSIONAL MANNER. A FEW MOORINGS FOR THE COMMITTEE BOATS AND ASSOCIATED CRAFT, A FEW MORE FOR VISITING YACHTS AND SHELTERED MOORINGS FOR KEELBOATS AS WELL AS DRYSAIL STORAGE AND LAUNCHING FACILITIES ARE NECESSARY. BECAUSE THE COMPETITIVE CRAFT HAVE NO AUXILIARIES, THE PIERS WILL BE PROPERLY ORIENTED TO THE PREVAILING BREEZES AND LARGE
CONCEPTS:

I FUNCTIONAL:

C. THE YACHT CLUB:

AREAS OF OPEN WATER FOR MANEUVERING BOATS UNDER SAIL WILL BE BOUNDED BY THE PIERS.

LIKE A YACHT CLUB, THE SAILING CENTER CONDUCTS ALL THE SAME ACTIVITIES ASSOCIATED WITH YACHTING: THE CEREMONIAL BANQUET, PUBLICATION OF SCHEDULES AND RACE RESULTS, ETC. THE CENTRAL BUILDING IS ALMOST A YACHT CLUB ONCE REMOVED.

II DESIGN:

A. THE FLOWER/PLANT/TREE:

IT LIES DORMANT DURING THE WINTER, REGENERATING ITSELF AND PROTECTING ITSELF AGAINST THE ELEMENTS. AT THIS TIME, IT IT AN INNOCUOUS, FOW.ArIDING THING, FOLDED TIGHTLY.

IN THE SPRING, IT OPENS AND BLOOMS INTO A DELIGHTFUL, COLORFUL THING AND TURNS IN THE DIRECTION OF THE SUN'S GREATEST INTENSITY.

ITS TEMPORAL NATURE IS A SOURCE OF JOY TO THE VIEWER, FOR ONE REALIZES THAT IT WILL NOT BE IN ITS PRESENT FORM AGAIN. IT'S A CONSTANTLY EVOLVING, EVER CHANGING ORGANISM — NEVER THE SAME FROM YEAR TO YEAR.

B. SKINS AND BONES:

A SKIN IS OFTEN A MEDIUM SEPARATING TWO OR MORE ELEMENTS OF DIFFERING CHEMICAL PROPERTIES AND/OR PHYSICAL STATES. IT IS USUALLY UNDER PRESSURE OR VACUUM AS A RESULT ACROSS ITS BROAD AREA, AND IT IS HELD IN PLACE BY TENSION APPLIED AT ITS EDGES. SAILS, HULLS AND FINS ARE THE SKINS A SAILOR IS ACUTELY AWARE OF, AND AIR, WATER AND LAND ARE THE MEDIUMS HE SEPARATES AND UTILIZES WITH THESE MEMBRANES.

SKINS ARE ESSENTIALLY OF MINIMUM THICKNESS AND WEIGHT.

ARCHITECTURALLY, THE SKIN IS THE MEDIUM SEPARATING MAN FROM THE ELEMENTS AND FROM UNWANTED ENCROACHMENT BY OTHERS. SOME SKINS ARE STRUCTURES UNTO THEMSELVES — SHELLS AND PLATES — WHILE OTHERS REQUIRE BONES FOR STRUCTURAL INTEGRITY.

BONES ARE THE STRUCTURAL SUPPORTS FOR THE NONSTRUCTURAL SKINS. THESE ARE CAREFULLY PROPORTIONED AND POSITIONED ELEMENTS, FOR THEY PROVIDE THE UNITY FOR THE ENCLOSURE AND SUPPORT. A SAILOR'S BONES ARE THE KEEL AND STRINGERS, POLES AND SPARS OF HIS CRAFT.
CONCEPTS:

II  DESIGN:

B. ideality, this center is a place where people may come to experience this notion of skin and bones in a relatively pure microcosm of earth, air and water. They should be encouraged to experience different skins, understand their places and strengths and know the forces to be used, admired, observed, felt and resisted.

C. outside play structures:

This is a place essentially for play by people of all ages. It should reflect that function. current ideas for play structures, especially the heavy timber types, lend themselves to architectural interpretations readily, especially when the site calls for pier foundations only. It establishes the rhythms and essential forms not clarified by the notion of skins and bones. It suggests that the architecture can be an extension of the playforms and vice versa.

III  DESIGN PARAMETERS:

A. for the site: explained under "the site: opportunities, limitations and contradictions"

B. for the architecture:

the buildings must be:
1. functionally workable — responding to needs for space, zoning within, internal circulation patterns and systems conduits, entries and exhausts.
2. visually meaningful — showing its elements when possible with some care taken to express how it is entered, what its essence is and its place in time and space.
3. sensorially harmonious — having no untoward dichotomies visually, aurally, or tactilly when in it place and functioning.

and otherwise:
1. lightweight in its feeling
2. low scaled with the land against the trees
3. simple materials and natural finishes, but spots of brightly colored skins for elements which are folded/removed during the winter
4. natural ventilation
5. odor producing elements like food prep and linen and sewage treatmentdownwind
TECHNOLOGICAL: "KINETIC ARCHITECTURE"

1. WAYS
2. COLLAPSED CUBE
3. AWNING

4. FOLDED CUBE

5. EXPANDABLE CUBE FROM CORE

6. 

7. ARM
EXCLUSION:

one man solved it, probably unwittingly: Philip Johnson's
"Glass House" and another, with a modern pavilion:

* both have one thing in common: no one
  lives nearby - within sight and no chance of intrusion

Is exclusion possible with people in close proximity?

Aboriginal (Reppan) Japanese House

This is really enclosure?

WHAT IMPLICATION FOR ME?
POSSIBLE COURSES FOR THE DEVELOPMENT OF THE SAILING CENTER:

I  CLUSTERED LIVING UNITS WITH FOUR TO EIGHT BEDS PER UNIT. SEPARATE BATHHOUSES. A SINGLE, SEPARATE CENTER CONTAINING THE ADMINISTRATIVE AND FOOD SERVICE ELEMENTS. AN EXTENSIVE SITE PLANNING EFFORT TO INTEGRATE THE DWELLINGS AND THE CENTER WITH THE BOAT HANDLING FACILITIES

A. THIS SCHEME WOULD NOT REQUIRE THE DEMOLITION OF THE EXISTING CABINS, BUT THE OTHER BUILDINGS WOULD BE REPLACED, WITH THE EXCEPTION OF TOWN HALL, BY THE SINGLE, LARGE BUILDING.

II CLUSTERED LIVING UNITS WITH EACH UNIT CONTAINING TEN - FOUR BED ROOMS. ONE COMMON BATHING/TOILET FACILITY PER UNIT AND AN ASSOCIATED LOUNGE. A SINGLE, SEPARATE CENTER CONTAINING THE ADMINISTRATIVE AND FOOD SERVICE ELEMENTS.

A. ALL EXISTING BUILDINGS, WITH THE EXCEPTION OF TOWN HALL WOULD BE REMOVED.

III A SINGLE, TOTAL FACILITY IN ONE LARGE COMPLEX DESIGNED FOR INCREMENTAL EXPANSION AND CONTRACTION, IF NECESSARY.

A. THEORETICALLY THE MOST EXCITING PROPOSITION SO FAR, BUT PROBABLY THE MOST EXPENSIVE TO REALIZE WITH THE NECESSARY ATTENTION TO SCALE, NATURAL VENTILATION AND INSIDE-OUTSIDE RELATIONSHIPS. ALL EXISTING BUILDINGS, WITH THE EXCEPTION OF TOWN HALL WOULD HAVE TO BE REMOVED.

SELECTION OF COURSE I FOR THE PURPOSES OF THIS THESIS WAS PREFACED BY CONSIDERATION OF THE POSSIBLE COURSES LISTED ABOVE. THE SEQUENCE OF STUDY, SHOWN BY THE PHOTOGRAPHS OF SKETCHES WHICH FOLLOW, CAN BE GENERALLY DESCRIBED HERE:

I  A SITE PLAN STUDY FOR THE REUSE OF AS MANY OF THE OLD BUILDINGS AS POSSIBLE AND AN ACCOMPANYING ESTIMATE OF THE WORK INVOLVED. COMPLETED BY DECEMBER, 1974. OMITTED THE NECESSARY 600' PIER REQUIRED BY PROGRAM, DOLLAR ESTIMATE TOO LOW, ACCORDING TO SARGENT, WEBSTER, CRENSHAW & FOLEY.
POSSIBLE COURSES FOR THE DEVELOPMENT OF THE SAILING CENTER:

SEQUENCE OF STUDY CONTINUED:

II CONSIDERATION OF THE OTHER COURSES POSSIBLE. COMPLETED IN JANUARY, 1975, WITH THE ESTABLISHING OF A MORE FINITE PROGRAM WHICH FAVORED COURSE I.

III CONSIDERATION OF THE POSSIBLE CONFIGURATIONS OF THE ELEMENTS OF THE PROGRAM IN INTERACTION WITH THE NECESSARY FLOW PATTERNS AND THE SITE REQUIREMENTS. AN ONGOING PROCESS WHICH DID NOT END WITH THE BEGINNING OF PRESENTATION.

IV THE ARCHITECTURE POSSIBLE IN RESPONSE TO THE CONCEPTS OF
A. THE FLOWER/KINETIC ARCHITECTURE 
B. THE USE OF SAIL FORMS AND YACHTING TECHNOLOGY 
C. THE PRINCIPLE OF EXCLUSION
D. THE EXPANDING FRAME 
E. THE IDEA OF SKINS/MEMBRANES AND BONES/SKELETONS 
F. CURRENT IDEAS CONCERNING OUTDOOR PLAY STRUCTURES

THE STUDY OF THE ARCHITECTURE NECESSARILY HAD TO PROCEED WITH THE WORK ON THE SITE PLAN, AND A DEVELOPMENT OF MAJOR PROPORTIONS IN ONE AREA LED TO CHANGES IN THE OTHER. THE RESULTING ARCHITECTURE IS MORE A REFLECTION OF THE STUDY OF CONCEPTS "E" AND "F" THAN OF THE OTHERS PRECEDING THEM; IN THE END THE ARCHITECTURE WAS TRYING TO REFLECT THE CONCEPTS BEHIND THE LARGE TIMBER FRAMED OUTDOOR PLAY STRUCTURES WITH THE NECESSARY MEMBRANES INFILLED WHERE NECESSARY.
Comments:

- HONORS LINK TO TOWN HALL
- GOOD POTENTIAL FOR CENTER'S BECOMING LINK BETWEEN LIVING UNITS & OTHER AREAS
- LANDMARK AS A CONDUIT
- GOOD POTENTIAL FOR VEHICLE ENTRY CONTROL
- SYNTHESIS OF LAND & WATER OPTIMAL
- PIER HAS POTENTIAL FOR DWELLINGS
- RESERVES LARGE PORTION OF SITE FOR UNASSIGNED USE
Possible Configurations:

- Vehicles
- Visitor Vehicles
- Pedestrians
- Boats
- Camping

Comments:

- Split functions difficult to manage
- Simply an update of existing conditions: problems.
ONUMENTS:

Possible close relationship to design concept
honors pedestrian link from old to new
uses colonnade as conduit to boat drop off
honors limited site by removing space-eating living quarters
vehicle circulation optimal in, out to parking needs thinking
synthesis of land, water elements
optimum for vertical development
pier shelters, dry sail launch area

OUT:

costly
essentially linear
- vehicles
- various vehicles
- pods
- boat campings

Pier is structure, placed at SE corner of site. Facility winterized elements on land while units are on pier.

Comments:

- USE OF NATURAL HARBOR AREA (BUT SOME AREAS ARE SHALLOW HERE)
- STRONG SENSE OF A PROCESSIONAL ENTRY DOWN COLONNADE
- DIFFICULT TO CONTROL VEHICLES WHICH MAY OR MAY NOT BELONG TO
  SPLIT FUNCTIONS
- NATURALLY QUIET AREA OF SITE NO LONGER SO
- TOTAL SITE IS EXPERIENCED AT FIRST FROM AUTO - LITTLE LEFT
  FOR EXPLORATION OR REFLECTION
Interferes w/ wind currents.

Rationale: since all schemes require a pier capable of harbouring 60 keelboats, each 10' wide, then a sizable amount of concrete is going to be placed to resist the forces of wave and ice in order to allow safe mooring. The pier must become a breakwater, in effect.

And since the site building conditions are extremely restrictive as far as buildable area, foundation types, require fill, all trucked in- and drainage systems, and continuing use of facility during construction, then the pier required for all schemes might well become the foundation for the center, placed in a superstructure above.

This configuration, oriented both to Henderson Bay and to the link to Town Hall and the dry sail area, would free the island to extensive use and lighten the load on its ecology. Only foreseeable problem is allowing the auto close enough to remove luggage and boats. (Luggage on carts from boat drop off points by college "red ape, who are several purpose gatherers.

Pier configuration
"FLOATING FACILITY:

- Keelboats launch
- CRYSAIL launch

EVALUATION:

- Heavy construction for protection against ice and wave action
- Intensive interaction with water
- Respects sensitive conditions and frees for recreational use
- Is obvious conceptually; marina/sailing centre
- Cost would be prohibitive
- Link w/ Town Hall to achieve
Interferes with wind currents

Rationale: since all schemes require a pier capable of harbouring 60 keelboats, each 10' wide, then a sizable amount of concrete is going to be placed to resist the forces of wave and ice in order to allow safe mooring. The pier must become a breakwater, in effect.

And since the site building conditions are vitally restrictive as far as buildable area, foundation types, require fill-all trucked in- and drainage systems, and continuing use of facility during construction, then the pier required for all schemes might well become the building foundation for the center, placed in a superstructure above.

This configuration, oriented both to Henderson Bay and to the link to Town Hall and the dry sail area, would free the island to extensive use and lighten the load on its ecology. Only foreseeable problem is allowing the autos close enough to remove, luggage, and boats. (Luggage on carts from boat drop off points by college-issued caps, who are general purpose gatherers.)
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