



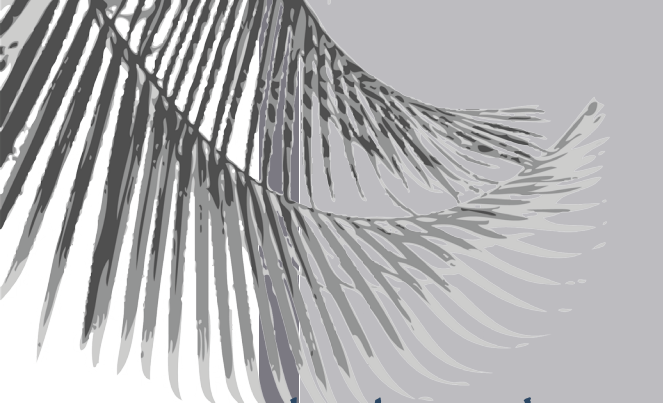
Kahalū'u Beach Park:

Design Charrette
Conceptual Master Plan
2008

University of Washington
Department of Landscape Architecture

Ua mau ke ea o ka `āina i ka pono!





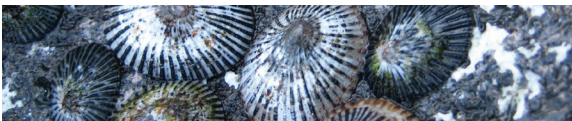
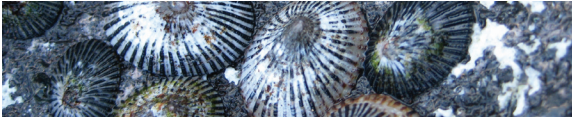
Kahalu'u beach

is a gathering place.
A place to have
community and
share the cultural
significance of this
land.



Conceptual Master Plan





Charrette Introduction: Design Description

These notes describe the design for Kahalu'u Beach Park, Kona, Hawai'i, prepared by students (Leslie Gia Clark, Riisa Conklin, Patrick Keegan, Annika McIntosh and Eric Streeby) and faculty (Iain Robertson) from the Department of Landscape Architecture, University of Washington and Brad Kurokawa, deputy director with the Hawai'i County Planning Department. The work is the product of a five-day charrette (16-21 June 2008) that included two public meetings, the first soliciting input on the park's important attributes and potential and the second seeking comments on three design alternatives. The charrette concluded with a public presentation of the design described below.

As with all charrettes the work was exhilarating and exhausting for participants but the products provide a focused snapshot of the park's condition and potential at this point in time. Many individuals assisted the design team's understanding of the complex web of sociocultural and environmental interactions that comprise the park, its natural and cultural history, and its contemporary uses and values. We thank all participants for their contributions and have included a list of individuals who met with the design team at the end of this report. The greatest part of the charrette's success is due to Cindi Punihaole of The Kohala Center who initiated the project and provided us with unfailingly gracious assistance throughout our work. Misunderstandings may occur in quick projects like this and any misinterpretations remain the fault of the design team and not those with whom we consulted. The design team returned home feeling honored to have been invited to participate in a design project of incomparable depth. Far from being a park designed at one point in time for a narrow range of recreational uses, Kahalu'u Beach Park and its landscape context is the product of a rich interconnectedness between the distinctive indigenous Hawaiian culture and the unique environment in which it developed.



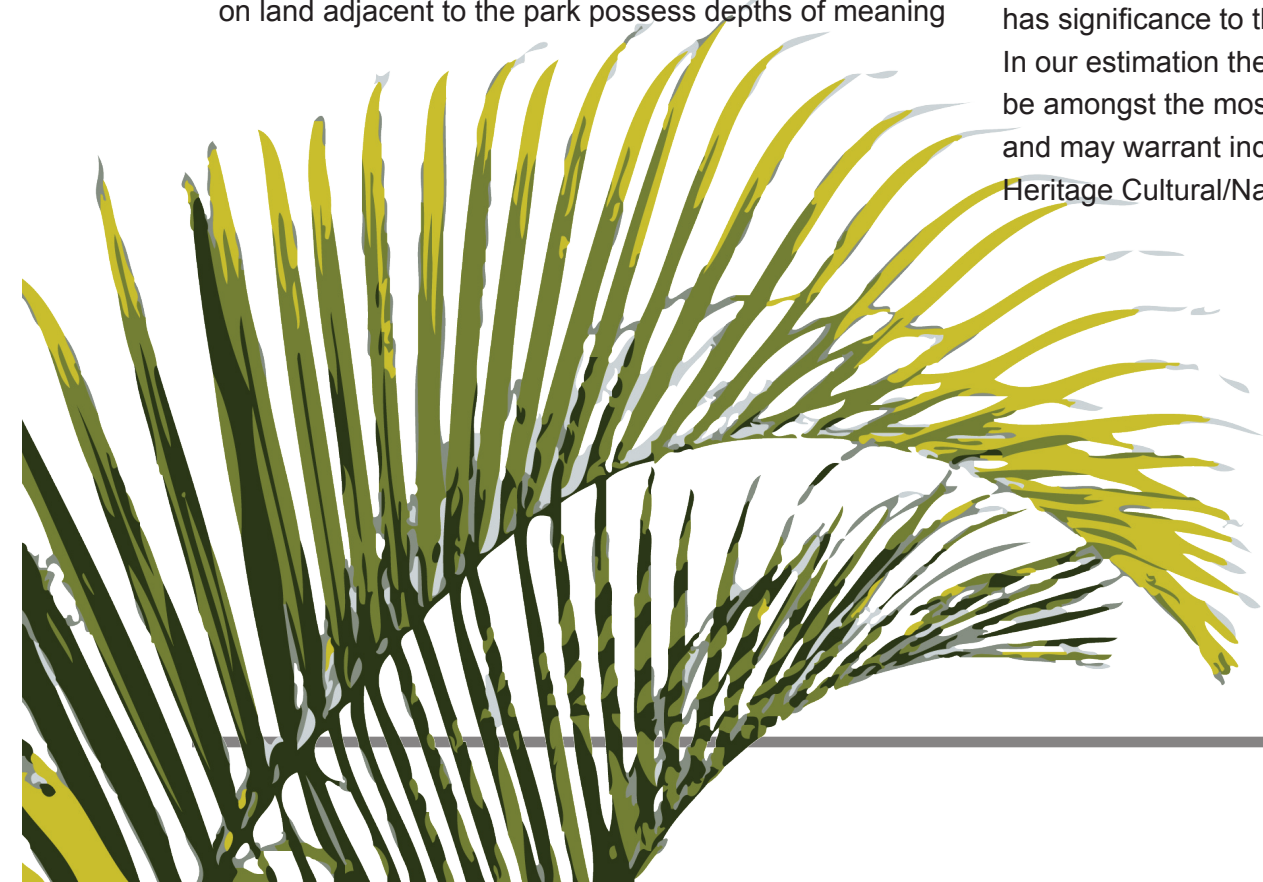
Kahalu'u Beach Park



Two factors deeply influenced the design team, first our growing realization of the significance of the Kona Coast to the Hawaiian people and their history. The park site itself, a scant 4.2 acres, is located in a place that can legitimately claim to be the historic heart of Hawaiian culture and religion. Cultural remains and sites on land adjacent to the park possess depths of meaning

and significance derived from centuries of associations with the Ali'i or royal families of Hawai'i and this locale retains important cultural and spiritual associations for contemporary residents. The second influential factor was our awareness of the ecological richness of the bay and coral reef. Together these factors make Kahalu'u Beach a site whose multi-dimensional but integrated parts comprise a place that is not only important in Hawaiian culture but has significance to the history of the wider Pacific islands. In our estimation the site and its surrounds appear to be amongst the most important cultural sites in the USA and may warrant inclusion on the UNESCO list of World Heritage Cultural/Natural sites.

The site's culture-steeped context provides it with a 'spirit of place' that is more literally true and present than is typical for most sites. This was a daunting realization for a design team with only scant knowledge of Hawaiian culture and history. However, the site's deep cultural and ecological richness was leavened by more prosaic design understandings--such as the ways in which it is being used, the varied experiences of users and the consequences of prior construction on and adjacent to it. Such factors are the common currency of landscape design and topics for which we felt comfortable making planning and design suggestions. The resulting plan developed from our understanding of how to address the park's pressing practical and functional needs combined with our growing appreciation of its sociocultural and ecological significance.

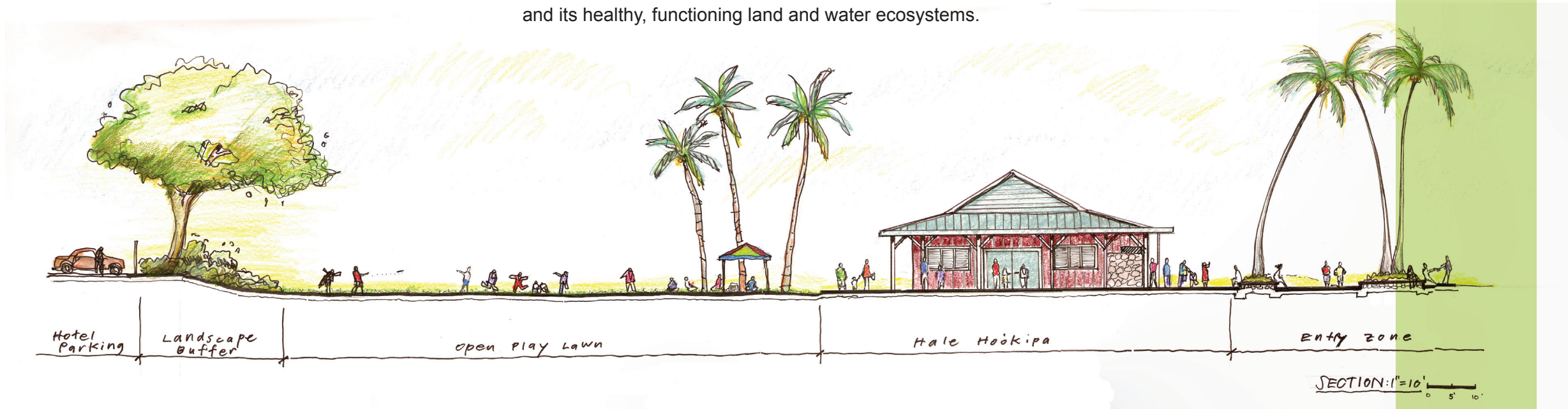


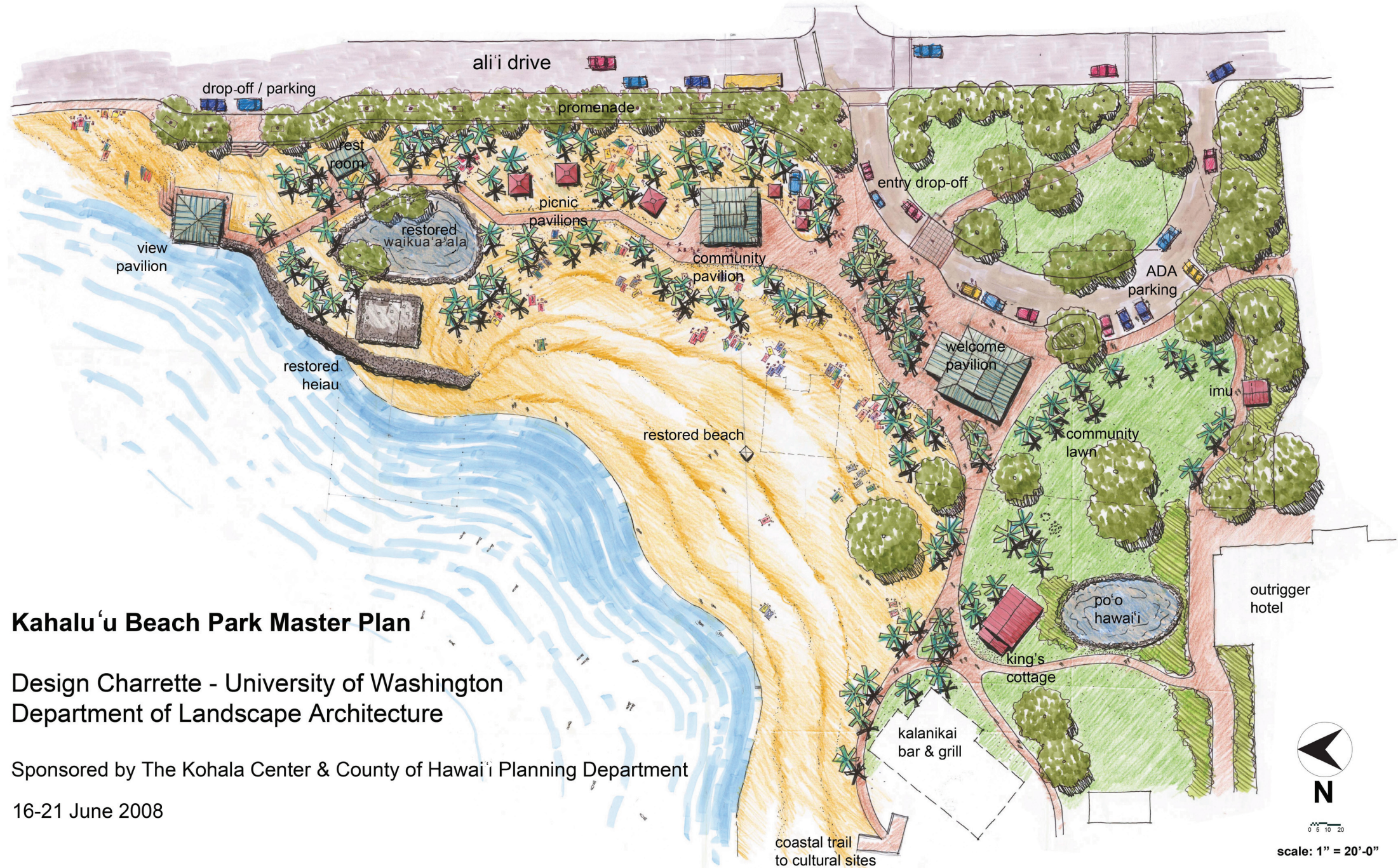
Conversations Generating the Master Plan: Conversations Generated by the Master Plan

The Kahalu'u Beach Park master plan represents the desires and aspirations of park users--local residents and visitors--as expressed to the design team in public meetings. It provides a vision of what Kahalu'u Beach Park could become. In one respect the master plan is a record of the conversations that generated the design proposals. In another respect its goal is to prompt conversations and explorations that need to occur before it can be implemented. For example, the plan

proposes the removal of the stone-faced concrete wall that currently bisects the beach. It does so because this rigid structure may alter in potentially adverse ways the currents that used to transport sand to the beach. Whether its removal will help rebuild the beach (which has lost large areas of sand in recent decades) we do not know; however, by proposing to remove it, we hope the plan will result in studies to determine whether the wall is beneficial or detrimental to currents that transport sand. The master plan is intended to encourage studies such as this that are essential to the park's future as a recreational resource and its healthy, functioning land and water ecosystems.

This report describes explorations and discussions that the plan is intended to promote and without which the park's cultural and natural environments will inevitably continue to decline. Despite our desires and attempts to fix them in static states, living ecosystems and cultural systems cannot remain fixed and static, and the dynamic nature of these systems is nowhere more evident than in shoreline natural processes and nowhere more fragile than in remote island ecosystems. Thus, although the master plan captures the desires and aspirations of those with whom we spoke, reaching that state will require considerable further study and discussion--some with natural scientists, some with state agency personnel, some with adjacent landowners. The plan provides a vision around which these conversations can and should focus.





Kahalu'u Beach Park Master Plan

Design Charrette - University of Washington
Department of Landscape Architecture

Sponsored by The Kohala Center & County of Hawai'i Planning Department

16-21 June 2008

ALI'I DRIVE

Ali'i drive is both the park's entrance and a formidable barrier to access due to its traffic. It is raised above the adjacent land to accommodate underground utilities and to raise it above floodwaters. A retaining wall or banks of varying height run along the edge of the roadway right of way (ROW). Parallel parking occurs along most of its unpaved shoulder, particularly at the north end adjacent to the surf beach and surf equipment shop. The master plan proposes a tree-covered pedestrian promenade along Ali'i Drive. This would require extending the ROW into the park--the distance depending on the promenade's width and assumes this would replace existing shoulder parking. The proposal would provide safer pedestrian connections between the park and adjacent facilities, a shady promenade from which to view the beach, a buffer between the road and beach, a bus transit stop, and also delineate the special nature of Kahalu'u Beach Park. Disadvantages include possible loss of some beach adjacent to the road and loss of parking along Ali'i Drive. Its inclusion in the master plan indicates that we believe the benefits of a promenade outweigh its negative impacts particularly looking to the future when the old church and house site across the drive are restored, and when a similar promenade is developed along longer segments of Ali'i Drive.



THE PARKING LOT

Throughout the charrette we became increasingly aware of the immense cultural and ecological value of the park site and adjacent shorelines and uplands. We also became aware of the pressures placed on these resources by the park's current intense use patterns. Discussions with Kamehameha Investment Corporation (KIC) suggested that a currently-unused parking lot across Ali'i Drive at the south end of the park might be available for park users. While this lot is across a busy street and further from the beach than the existing parking lot, we felt that the shoreline has tremendous ecological, social and cultural value and that to devote more than a quarter of the park for vehicle parking is most undesirable if other relatively convenient and possible alternatives exist. The park's parking lot floods during severe storms which limits the uses that the area can accommodate.



By proposing alternative uses for the park's parking lot the master plan encourages conversations with KIC about use of its parking lot and with county transportation officials about providing safe (grade separated or at grade) access to the park across Ali'i Drive. The changes to the park that could arise from these discussions would allow it to accommodate the same number or more users while reducing impacts on beach and lagoon flora and fauna. Removing on-site parking would also provide space for different kinds of use such as social gatherings. We heard requests for more social gathering spaces, and in particular a grassy open space. Replacing the parking lot with a lawn indicates the benefits to the park of reaching an agreement to do so with the adjacent KIC land owner. These discussions should include considering how Kahalu'u Beach park can augment KIC's master plan goals.

THE NEW PARK ENTRY SEQUENCE

First impressions are important. To make visitors understand and respect the park's ecological and cultural significance it is essential to alter their perceptions as they enter the park. This is done in the master plan by altering the entrance's physical configuration and appearance. Users driving into the park currently see restroom entrances under a dilapidated pavilion roof at the end of a short street littered with utility poles, crash barriers, railings, competing signs, tsunami warning speakers, terminated by a crumbling concrete Jersey barrier, all of which block views of the beach and bay and set an inimical and negative tone for the park. Lost amid this ad hoc cacophony of decaying infrastructure competing for visitors' attention is the sign welcoming them to Kahalu'u Beach Park. This is not to suggest that the park should be 'tidied up' to resemble the safely antiseptic placelessness of high-end resorts where visitors are cut loose from social, cultural, or ecological moorings and are lost in a supposedly paradisiacal, but placeless, place. Other possibilities exist: the design may be responsive to, and respectful of, the genius loci or spirit of the place. Few, if any, American county parks possess such a rich cultural and environmental spirit of place as Kahalu'u Beach Park, and it is this innate potential that the master plan seeks to evoke.

The proposed entry loop road (including drop-off zone and disabled parking) provides framed views of the beach and bay between two new pavilions. Raised plant islands enclosed by seat walls, separate vehicles from the beach and act as transparent screens or veils that frame beach and bay views and make the entry experience even more enticing and interesting. Plant islands will be shaped and located to provide convenient beach access while encouraging visitors to enter the larger education pavilion to learn about the beach, bay, and reef prior to moving onto the beach.



THE KIHARA FAMILY PROPERTY

The master plan incorporates the private property between the existing parking lot and Ali'i Drive into the park. This allows for a safer and more graceful alignment for the loop road but its acquisition is not essential to the redevelopment of the parking lot. We propose this to prompt discussions with the family exploring mutually-beneficial redevelopment options. This property is covered by lava rock that may have been a house foundation but is in a rather decrepit state. There is a dip about 20 feet wide and 5-6 feet deep between the rock platform and Ali'i Drive that is invisible from the park and the street making it hard to manage. This property could provide a convenient and beautiful connection between the park and the proposed parking lot mauka across Ali'i Drive. It may also be a shady lawn commemorating the family's heritage on the land.



THE SHADY LAWN

A shady lawn with a traditional imu or barbecue structure is proposed on the site of the current parking lot and extending into the adjacent hotel grounds. The location of the imu on the master plan should be changed, as smoke and odors from it are likely to adversely affect the hotel. A location convenient to the shady lawn but away from the entry loop road is desirable. A spacious, sheltered lawn will be a valuable addition to the park.

THE EDUCATION & OPEN PAVILIONS

The master plan relocates the pavilion back from the shoreline. In its current location it blocks views, and dominates and divides the beach into separate parts. When it was built, the sandy beach was much larger and the pavilion was much further back from the shoreline than it now is. It is subject to storm damage, as is most of the park, but the proposed pavilion locations may be slightly more sheltered than is the current pavilion.

The pavilion is a very important structure in the 'life' of the park and beach. It provides shade and shelter for a variety of gatherings at different times of day; tables and benches for picnics; a food stand; lit space for evening use; restrooms; and a basic kitchen/food service counter. Assessment of its current condition suggests that replacement makes greater sense than repair.



The master plan proposes two pavilions rather than a single one. One of these is enclosed to house restrooms and educational facilities and the other consists only of a roof and concrete floor for cultural events and social gatherings. These proposals encourage thorough discussions of the spatial needs of different programs and activities and their location in the park relative to the beach, shore, and access road as well as shelter from storm surges. The pavilions also prompt discussion of the need and best location for food and equipment trucks. Should some of these functions be incorporated in a pavilion to reduce beach clutter?

The master plan suggests that although the pavilions are important structures that can enhance the park they should not visually or functionally dominate the beach and shore and their size should be kept to a minimum. We believe that dividing the functions between two pavilions rather than one might increase their flexibility and usefulness.

THE CONCRETE WALL, SMALL PAVILION & HEIAU SITE

As noted before, the stone-faced concrete wall that runs across the beach was intended to reduce sand erosion but may be contributing to different patterns of erosion and deposition. The wall has been undermined and has failed in one location breaking rather than slumping as traditional lava rock walls that allow water to pass through them may do. The wall is the product of a time when it was believed that rigid structures could control beach processes. Subsequent events and experience suggest that this approach has mixed success and may contribute to unanticipated and undesirable patterns of erosion and deposition.

The proposal to remove the wall requires careful study before implementing. It is important to hold a conversation, i.e. conduct research, with geo-technical experts about whether erosion and deposition

processes at Kahalu'u beach would be better with or without the wall. Experiments could take the form of computer modeling of shoreline processes or physical actions such as breaching the wall in several locations or removing parts of it and assessing changes in shore erosion/deposition patterns. If left, it is likely that future large storms will undermine the wall causing further failures. To ensure the continued health of the beach and bay ecosystem and their natural processes, it is essential to compare the results of leaving and removing the wall so that an appropriate decision may be made. Many factors may be contributing to the reduction in sand in the bay including: obstruction of





long-shore 'drift cells' by the Outrigger Hotel and other structures, sea level rise, changes in storm patterns and intensity resulting from climate change, changes in the growth of coral sand as a result of changes to the reef, changes in wave patterns resulting from coastal "armoring" along Ali'i Drive, etc. We were unable to predict which factors might be contributing to the reduction of sand in the bay; however, by proposing the wall's removal we are encouraging a discussion of the effects of these factors to begin.

The master plan does not propose removing the stone-faced concrete wall around the small pavilion, which we understand is located on the site of an ancient heiau. However, studies of the effects of removing

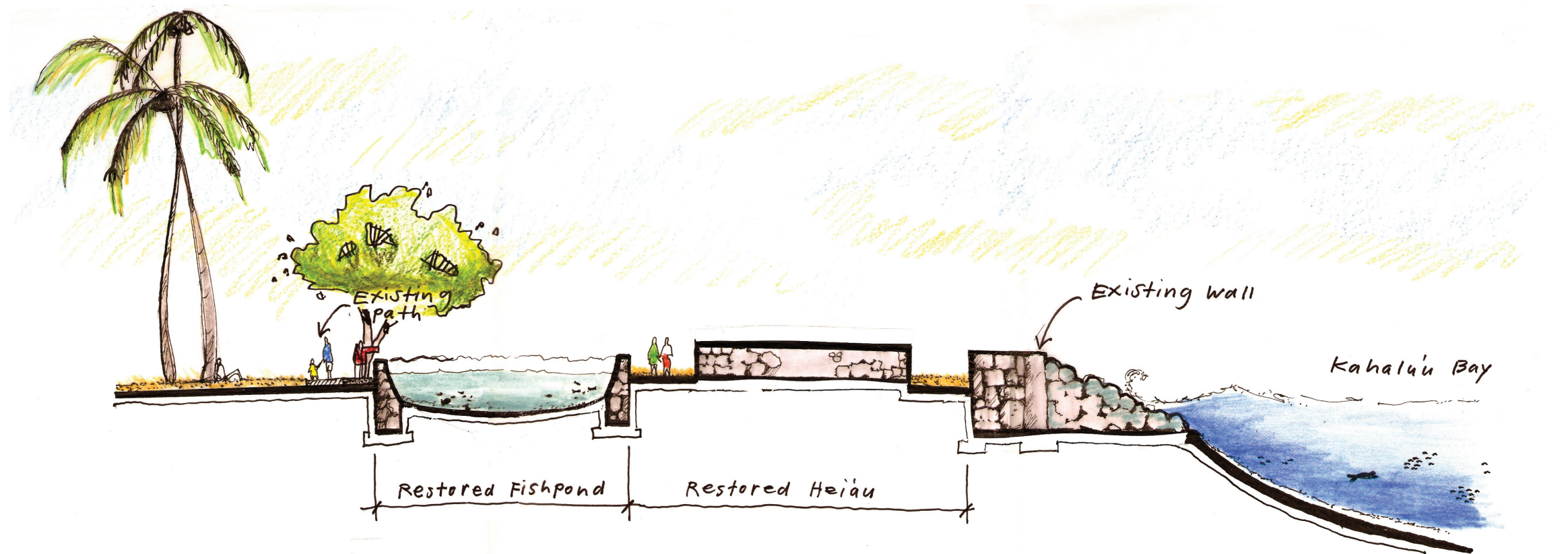
the large wall should consider the effects of replacing this wall with a traditional dry-stone, porous structure and restoration of the heiau platform. Replacing this wall would be part of a more comprehensive restoration of historic cultural sites in this part of the park. The master plan proposals are based on the assumption that restoration and preservation of historic cultural remains should be given precedence over contemporary needs and uses in this region. Hence the master plan relocates the small pavilion from the historic heiau site.

This small pavilion currently accommodates different user groups than do other parts of the park. It appears to offer a 'toehold' for individuals with historic family ties to the area and its removal would have undesirable impacts on their vulnerable lives. Equitably and safely accommodating a wide spectrum of users and needs is, in our view, an essential program element for a successful master plan. Upgrading park facilities may have unintended consequences, making some users feel uncomfortable or unwanted in the park. Retaining but relocating the small pavilion

off the site of the ancient heiau is intended to foster a discussion of park use patterns and user groups. This section of the park may be more vulnerable to storm surge and damage than other areas but an open pavilion with a floor elevation similar to that of Ali'i Drive and located further back from the shore than the current small pavilion is unlikely to be more vulnerable to damage than the current pavilion is.

THE FISH POND & OTHER CULTURAL REMAINS ON THE PARK

The fish pond is in poor condition as a result of many factors: lack of maintenance/ reconstruction of enclosing walls; lack of sand removal from the pond; reduction in size; changing sand deposition patterns around the pond; growth of vegetation in the pond; and loss of palm trees around it; etc. The fish pond is the park's most significant historic cultural feature. The master plan does not restore it to the size shown on the mid-century map (approximately three times its current size) but it does propose that it be protected and restored along with the heiau.



Restoration would include sand and vegetation removal from the pond and reconstruction of surrounding walls. These activities should be guided by an archaeologist familiar with restoration of such sites and features. The master plan suggests a discussion with archaeologists familiar with native Hawaiian facilities. It seems that cultural features such as these may require continual upkeep rather than simple restoration followed by no maintenance. The restored pond could become part of an expanded “ReefTeach” program or a new “Friends

of the Park” nonprofit organization. Its restoration and careful management could help restore fish populations in the bay.

We did not examine the lava vent/springs shown on the historic map along Ali'i Drive but a complete survey of archaeological remains on both sides of Ali'i Drive should take place in conjunction with the redevelopment of the adjacent church and house sites to avoid irreparable damage to cultural features of State

or national significance. (KIC has a map that identifies other nearby places of archeological interest. See also the suggestion for UNESCO World Cultural Site listing of the area in the Introduction.) It seems essential that the Parks Department and others interested in the redevelopment of the park and surrounding cultural features, including KIC and the church property owners, should discuss the interconnected cultural values of all of these properties. Who should convene and orchestrate these discussions is a question that the master plan poses but cannot answer.



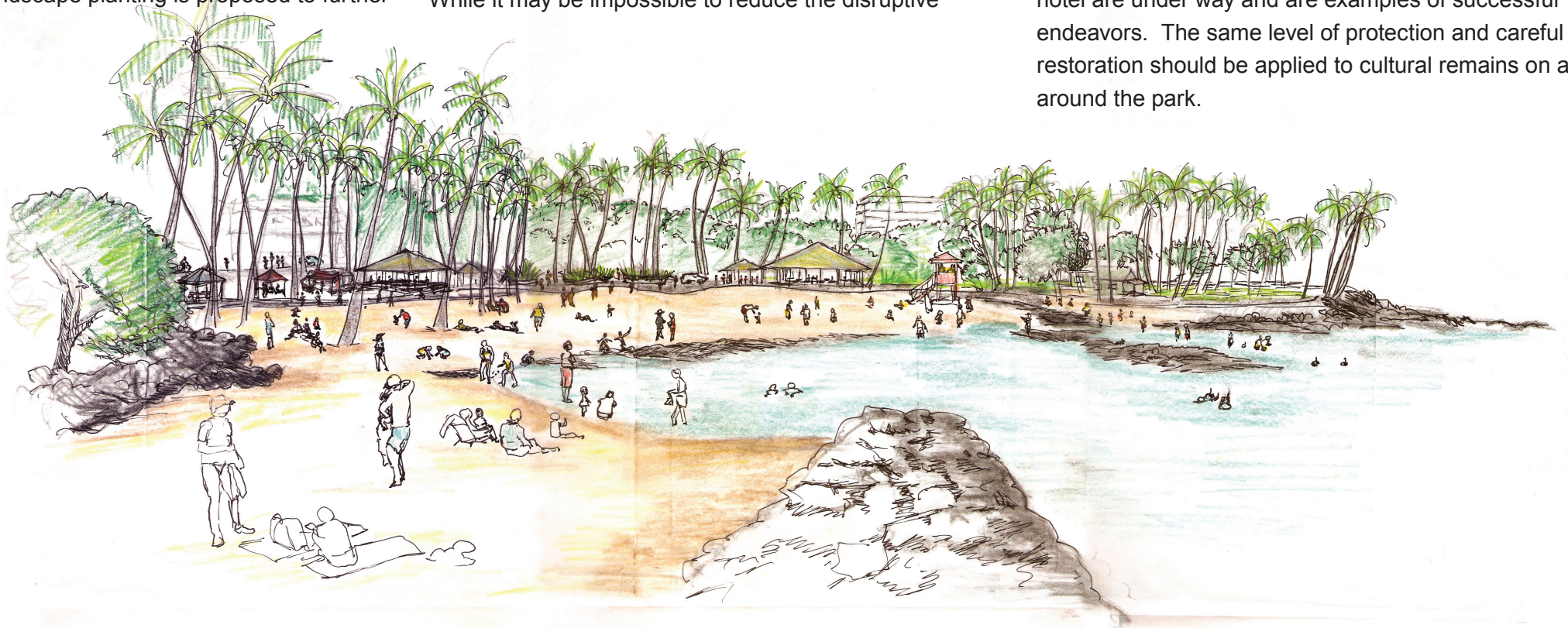
ADJACENT HOTEL GROUNDS & CULTURAL SITES

The master plan's boldest proposal is the removal of the chain link fence and wall separating the grounds of the Outrigger Hotel from the park, allowing shared use of hotel grounds and park. A common landscape of lawn and other coastal plantings modifying the existing hotel landscape planting is proposed to further

unify the park and the hotel grounds. This provocative proposal has enormous implications for both park and hotel. We were emboldened to make this far-reaching proposal after reviewing the hotel's medium- and long-term development options. The hotel projects out into the sea over the top of ancient cultural sites in ways that would not be permitted today. If the area's cultural remains are to be reconnected to restore their historic continuity it is necessary to discuss alterations of current land ownership boundaries that divide the area into disconnected and mutually-inaccessible parts. While it may be impossible to reduce the disruptive

effects of Ali'i Drive separating the mauka region of the Kahalu'u ahupua'a from the park there may be possibilities for reconnecting historic sites along the shore to the north and south of the park and these should be explored on a neighborhood and regional scale in conjunction with the redevelopment of the park.

The need for a broader discussion of the significance and value of cultural sites in the area cannot be overemphasized. Extensive restoration of important heiau and other cultural properties to the south of the hotel are under way and are examples of successful endeavors. The same level of protection and careful restoration should be applied to cultural remains on and around the park.



**PARK PROGRAMS:
SNORKELING AND OTHER FISHING
ACTIVITIES, THE CORAL REEF & TURTLES,
FEES/RESTRICTIONS OF USERS/
CONCESSIONAIRES**

Many visitors come to enjoy Kahalu'u Beach Park's sandy beach and to swim and snorkel in the lagoon enclosed by the Menehune wall and reef. The Kohala Center's ReefTeach program is an essential effort to reduce damage by snorkelers and swimmers to the bay's fish, coral, and feeding sea turtles. The education pavilion would provide more permanent and effective facilities for this essential educational program, but

whether the bay can sustain its present intensity of use can only be determined by long-term monitoring of resources which should be done by the County Parks department or other appropriate entities as part of stewardship of these facilities.

Here is where program uses and physical facilities intersect. Should the park master plan accommodate and encourage more visitors or not? Should it limit visitors by instituting fees and controlling access? Should it provide preferential access and use by native Hawaiian families from the immediate area? These are some of the complex questions raised or alluded to during our initial public meetings for which we as designers are unable to provide definitive answers as they are tied to larger social and equity values.



However, the restoration of the park must consider these questions.

SURFER BEACH & RESTROOMS

At the north end of the park, wedged against the Ali'i Drive retaining wall and historic terraces to the north is a small triangle of beach that provides access to the best surfing in the bay. Users typically reach this beach, which is heavily used during good surfing conditions, from a small pullout/parking lot and steps. Many surfers find it more convenient to pull out of the water to the north of the park using a historic canoe launch slip in an area sometimes used by feeding turtles.

A detailed study of the impact of surfers on the historic fabric of the canoe launch site and on turtle feeding patterns is necessary.

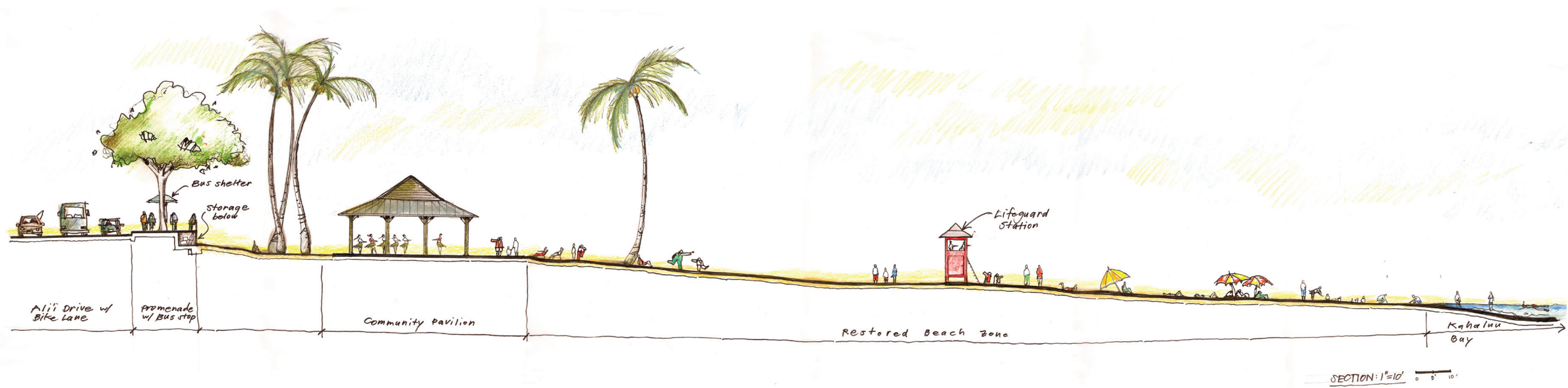
The master plan proposes replacing the rather dilapidated restrooms at the north end of the park. Early discussion of alternative sewage treatment methods were not continued because they appeared unlikely to be able to accommodate the intensity of use that park facilities receive or be able to sustain salt-water intrusion. Systems that might increase seepage of partially treated sewage water into the bay were considered an unacceptable potential danger for water quality.



SEA LEVEL RISE, STORM SURGES

Rising sea levels and increasingly severe storms are part of the future of oceanfront property worldwide. The short- and long-term effects of these changes cannot be predicted precisely for specific locations; thus, it is essentially impossible to thoughtfully or ‘appropriately’ plan for these changes. At the very least plans should not place new facilities in shore edge locations

that are likely to be damaged or flooded within the facilities’ predicted life spans. The pavilions proposed in the master plan are not intended to be elaborate or expensive structures. A lightness of construction is as appropriate as the use of traditional construction styles. The two beachfront pavilions are open facilities that should permit storm surges to sweep through them without structural damage.





CONCLUSIONS

The problems faced by Kahalu'u Beach Park and the opportunities associated with its intrinsic values, facilities, and environment are in many ways a microcosm of those faced throughout the Hawaiian islands (and indeed, globally by indigenous cultures and oceanfront communities). Like many other precious locations, Kahalu'u Beach park is at risk of being 'loved to death' by ever more visitors eager to enjoy its delightful environment and experience its incomparable ecological and cultural resources. Can we reconcile the needs of visitors with the Hawaiian host and local culture, people, and ecosystems of this place? Can we develop a plan suitable for this unique and distinctive place? Can we express its genius loci or spirit of place? These were the underlying questions that we confronted in preparing this master plan. To suggest that a single quickly-produced master plan can resolve the tangle of interconnected and interacting uses of this park is presumptuous in the extreme, and we do not pretend, or wish to suggest, that the plans we prepared during our delightful and intense charrette does so. However, we believe that the master plan lays open, even if only imperfectly, the issues and questions that need to be addressed if solutions are to be developed, resources conserved, and lives enriched. These will require sustained effort but this is a site and a place deserving of the most intensive effort to preserve for future generations. Kahalu'u Beach park and the surrounding context is an incomparably valuable place. We hope this master plan will help in its preservation, protection and development.





mahalo nui loa