

SUMMARY

S1 PROPOSING AGENCY AND ACTION

The County of Kaua‘i, Department of Public Works (County DPW) proposes to construct a shared use path for pedestrians, bicyclists, and other users from Lydgate Park to Waika‘ea Canal in Kapa‘a, a distance of approximately two miles. This project, referred to as the “Lydgate Park-Kapa‘a Bike/Pedestrian Path,” is part of a longer, continuous pathway that will ultimately travel along the east side of Kaua‘i from Nāwiliwili in the south to Anahola in the north. The scope of this project includes two other feeder routes:

- (1) A shared use path connecting the Lydgate-Kapa‘a bike-pedestrian path to the Wailua House Lots, and
- (2) A shared use path connecting the Kawaihau Road bike-pedestrian path to the Kapa‘a-Keālia bike-pedestrian path.

The bike/pedestrian path will be 10 to 12 feet wide and allow movement in both directions. It is intended to accommodate a wide variety of users; however, motorized vehicles will not be allowed with the exception of motorized wheelchairs, emergency vehicles, and maintenance vehicles. The path will be constructed from concrete with graded shoulders. Under some environmental conditions, the path may be designed as a boardwalk. In other areas, existing development may preclude a full, 10-foot wide path, thereby requiring consideration of other options, such as improved, widened sidewalks or “sidepaths.”

Specific design elements will be established in the design phase of the project. For this document, the proposed action (unless otherwise stated) is assumed to be a facility built in conformance with guidelines for bicycle facilities published by the American Association of State Highway Transportation Officials (AASHTO) and standards established in the Americans with Disabilities Act (ADA) Accessibility Guidelines or ADAAG.

The Lydgate Park to Kapa‘a bike/pedestrian path will not include comfort stations, pavilions, picnic areas, or new parking areas. However, possible design elements related to known site conditions, such as grading, retaining walls, railings, fencing, and/or changes to traffic patterns, are described and discussed in this document. Other elements that may be included in the proposed action are landscaping, signage, and amenities, such as trash receptacles and benches. The decision to incorporate these features will be made during final design.

The County of Kaua‘i will construct, own, and operate the facility. The project will be funded, in part, by the U.S. Department of Transportation, Federal Highway Administration.

S2 PROJECT CORRIDOR

The project begins on the mauka side of Aloha Beach Resort, and terminates at Waika‘ea Canal. Mauka to makai (west to east), the project corridor includes a swath about 1,000 feet wide, from the inland canal system to the coastline. Two connector paths are oriented in a mauka-makai direction and extend further inland to serve the hillside communities of Wailua House Lots and Kawaihau.

Between the project termini, the bike/pedestrian path will traverse one of Kaua‘i’s most urbanized areas. Development densities and the mix of land uses are amenable to non-motorized forms of access and travel.

The project satisfies three general principles contained in FHWA regulations (23 CFR 771.111(f)) on framing transportation projects.

- (1) The project has logical termini—beginning at the north end of the existing Lydgate Park shared use path, and terminating at the south end of the Kapa‘a-Keālia shared use path
- (2) Have independent utility by serving the circulation and recreation needs of the local Wailua-Waipouli-Kapa‘a community. The proposed path will link residential, commercial, and resort areas, and provide connections to schools, parks, and other community facilities.
- (3) The proposed action does not restrict consideration of alternatives for other foreseeable transportation improvements in the project corridor. Planning for the Lydgate Park-Kapa‘a bike/pedestrian path was coordinated with other HDOT and County transportation initiatives.

Because of the project’s breadth and cost, the project sponsors have acknowledged the likelihood that it may be implemented in sections over time. Therefore, the project has been divided into phases that include:

- Lydgate Park-Kapa‘a
- Wailua House Lots Phase
- Kawaihau Phase

S3 PROJECT HISTORY

The Lydgate Park-Kapa‘a bike/pedestrian path is one part of a longer, 16-mile shared use path that has been proposed for the east side of Kaua‘i from Nāwiliwili to Anahola. The idea for the path was first proposed in the early 1990s by a citizen advisory group convened by the County Council. The advisory group also advocated a “coastal bikepath”

that was included in the State Department of Transportation’s bicycle master plan, called *Bike Plan Hawaii*.

In the meantime, a grassroots initiative had begun at Lydgate Park leading to the design and construction of Kamalani Playground and Bridge. The time contributed by volunteer workers to build the bridge—hundreds of hours in sweat equity valued at \$550,000—was used to satisfy the County’s match toward a grant of \$2.6 million obtained from the federal government. Those funds were used to plan and build 2.3 miles of bicycle/pedestrian paths (and amenities) that will connect to this project. The Lydgate Park project was completed in 2003.

Following the Lydgate Park Bike/Pedestrian Path, the County began planning a path from Kapa‘a to Keālia. This project includes coastal land conveyed to the County of Kaua‘i from the State of Hawai‘i through a series of Executive Orders, and land dedicated by the private landowner of the Keālia Kai Subdivision to fulfill a condition of the Special Management Area Permit and subdivision approval. The new path will start at Waika‘ea Canal and extend approximately 4.3 miles to Ahihi Point in the northern Keālia area.

Planning for the Lydgate Park to Kapa‘a Bike/Pedestrian Path started in late 2003.

S4 PURPOSE OF AND NEED FOR ACTION

The bike/pedestrian path project addresses several needs:

Improved safety for pedestrians, bicyclists, and others using non-motorized modes of transportation. At present, pedestrians, joggers, and bicyclists in the project area use shoulders or the sides of roads, or share sidewalks where available. The proposed action will increase the safety of this situation by separating these users from passing vehicles (FHWA 1994, 2001). The path has a design width of 10-12 feet, as recommended by the AASHTO guidelines, to accommodate a mix of users.

Increased choices among alternative modes of transportation. Shared use paths have been popular across the nation because separating motor vehicles from those traveling on foot or by bicycles increases people’s sense of safety and comfort. These characteristics are fundamental to giving people viable choices in how they travel (FHWA 1994, 2001). The proposed path is intended for use by all age groups, and those who possess a range of skill levels. It will facilitate the mobility of youths, elderly people, and others who do not drive or have access to automobiles. This is particularly important in a region such as Wailua-Waipouli-Kapa‘a where 43% of households have children under the age of 18, compared to 38% of households statewide. The path is expected to ease the concerns of

parents and give families more flexibility and choices when making transportation arrangements to support their everyday activities.

Greater connections among destination nodes. The proposed path will supply a connection between an existing path (at Lydgate Park) and a path that is currently being constructed (from Kapa‘a to Keālia). It is the continuity of the path network—what transportation specialists call “system connectivity”—that will increase the usefulness of the transportation facility. An expanded network allows people to go where they want to go.

Enhanced access to natural areas, while minimizing impacts on sensitive ecosystems or encroaching on private property. The Wailua-Waipouli-Kapa‘a area is surrounded by natural places of great scenic beauty. The proposed action will enable residents and visitors to access some of these places under conditions that are better controlled than they are at present. Beach access is a traditional part of the island lifestyle, supported by numerous laws, government regulations, and court actions. Despite efforts to preserve mauka-makai and lateral accesses, as land is developed, it is sometimes difficult for members of the public to determine where the public lands are or where they can go without trespassing on private property. The path would indicate a clear travel way.

For those who require wheelchairs or other aids to mobility (as well as parents with children in strollers), a hard, smooth surface will make it easier to travel through the outdoors, especially in places that are sandy, rocky, or covered with grass. To the extent that it is technically feasible, the path will be designed in compliance with guidelines established under the Americans with Disabilities Act.

Increased opportunities for recreation and physical fitness. The proposed path is needed to provide more opportunities for outdoor recreation and fitness. There is no other area in town that provides a safe, dedicated facility for people to walk, jog, and bicycle. Recent reports by the Centers for Disease Control and U.S. Surgeon General, among others, indicate that obesity and related chronic health problems have reached near-epidemic proportions (see for example, Carmona, 2003 and Gerberding, 2005). With sedentary lifestyles blamed, in part, facilities that enable greater physical activity are important assets for the community’s health and well-being.

Economic activities associated with use of the path. Another objective of the project is to support the region’s economic base. Across the country, places with popular bike paths and rail-to-trails have found that their facilities have contributed to entrepreneurial growth, as small businesses step in to offer bike rental and repair, refreshment sales, and related goods and services.

The proposed shared use path is also expected to boost tourism, the county’s leading industry. Given the regional scope of the path system and its scenic qualities, it could

emerge as one of Kaua‘i’s leading visitor attractions. The bike/pedestrian path would add a new activity for visitors to experience, perhaps warranting an extension of their stay. And since the path is consistent with the type of activities favored by the ecotourism market, it could help the local industry tap into this market niche.

Implementation of bikeway proposals in the *Kaua‘i General Plan* and *Bike Plan Hawaii*. The proposed action is mentioned in the *Kaua‘i General Plan* (2000) and in *Bike Plan Hawaii* (1994, 2003). Both the *General Plan* and *Bike Plan Hawaii* were developed with extensive community outreach and participation efforts. Consistent endorsement of the bike/pedestrian path proposal indicates steady community support for over a decade and in different planning venues.

S5 PROJECT ALTERNATIVES

S5.1 No Build Alternative

The “no action” alternative assumes the status quo. Under this alternative, the project would not proceed. Bicyclists, pedestrians, joggers, and others would continue to use road shoulders, sidewalks, and informal footpaths, as they currently do; however, there would be no improvements to these travel ways.

S5.2 Build Alternative

Lydgate Park-Kapa‘a: Overview

The preferred alternative for the Lydgate Park-Kapa‘a alignment is a combination of Alternative 1 (Shoreline Path) and Alternative 3 (Canal Path), as described and evaluated in the DEA. This alternative was selected as the alignment that would optimize project objectives (provide a safe route for pedestrians and bicyclists that is separated from vehicular traffic to the extent possible, connect origin and destination nodes, enhance access to beach and recreational resources, and provide a scenic, outdoor experience), while avoiding, minimizing, or being able to mitigate adverse environmental impacts. This alignment, hereafter referred to as the “Lydgate Park-Kapa‘a Build Alternative” is shown in Figure S1.

The project’s start point lies between the Aloha Beach Resort and Kūhiō Highway. The path will be aligned adjacent to the northbound approach to the cane haul bridge. The path will be located within the highway right-of-way; however, it is adjacent to Wailua River State Park. Heading north, the path will continue across Wailua River and along the makai side of Kūhiō Highway. North of the Seashell Restaurant, the main alignment will follow Papaloa Road, then turn mauka at Lanikai Street. A user-activated traffic signal is planned at the intersection of Kūhiō Highway and Lanikai Street to facilitate crossing the highway.

On the mauka side of Kūhiō Highway, the path will jog inland, heading northward using the roadbed of a former cane haul road. After crossing the temporary bypass road, the path will continue along the Waipouli Drainage Canal, behind the Waipouli Town Center, then along the south bank of Uhelekawawa Canal back to Kūhiō Highway. The path will shift to the makai side of the highway, then use the rights-of-way on Ala Road, Niulani Street, and Moanakai Road before reaching the northern terminus at Waika‘ea Canal.

Two spurs to the main path will connect the path to major activity nodes. One spur will extend along the length of Papalooa Road, providing access to the Coconut Marketplace. Another spur will start north of Kauai Coast Resort at the Beachboy, where new resorts are being planned. This spur will provide access from the Waipouli coast resort area to the Waipouli Town Center/Kauai Shopping Village commercial hub.

Lydgate Park-Kapa‘a Alignment: Detailed Description

Wailua River Crossing

Between the southern terminus and Wailua River, the path will be aligned on the makai side of Kūhiō Highway. To cross the river, a new bike/pedestrian bridge will be attached to the seaward side of the existing cane haul bridge. The cantilevered section will be part of a HDOT project to reconstruct the cane haul bridge by removing the existing deck and replacing it with a wider, prefabricated deck capable of carrying two vehicular lanes. The existing bridge will provide full vertical support for the bike/pedestrian extension and no new structures are needed in the river.

Wailua Beach Park

On the north side of the river, the path will run parallel to Kūhiō Highway, along the length of Wailua Beach Park and as far inland as practicable. However, the path will be aligned along the makai side of the two existing parking areas to avoid conflicts with vehicles entering and exiting the park from the highway. There is an existing rock wall separating the highway from the park, and it is proposed that the wall be extended as a barrier between the path and the highway. The land through this stretch is part of Wailua Beach Park, a County-owned facility.

Path users will have two options to cross Kūhiō Highway from the makai side to the mauka side. One option involves a pedestrian bridge over Kūhiō Highway that will be constructed as part of the Coco Palms redevelopment project. The makai end of the pedestrian bridge will be incorporated into the design of the new Seashell Restaurant. As a second option, the bike/pedestrian path will continue northward along the mauka frontage of the new Seashell Restaurant. The restaurant will be designed to accommodate the shared use path outside the highway right-of-way. The path will continue down

Papaloa Road until Lanikai Street, where the main alignment will turn mauka. A spur will extend the length of Papaloa Road, providing access to Coconut Marketplace.

On the main pathway, a user-activated signal is planned for the intersection of Kūhiō Highway and Lanikai Street, but must be studied to determine if signal warrants are satisfied. This signal would be synchronized with the Hale'ilio Road traffic signal, located approximately 525 feet to the south. The bike/pedestrian path's impact to traffic conditions at the crossing will be minimal due to other improvements that are being implemented to improve traffic flow in the area.

Mauka Canal Section

On the mauka side of Kūhiō Highway, the path will split into two legs. One leg will continue in a mauka direction, becoming the Wailua House Lots Path (see description of the Wailua House Lots Phase, below). The main leg will turn north, running parallel to Kūhiō Highway.

Between Wailua House Lots and the temporary bypass road, the shared use path will be aligned over a former cane haul road. A mid-block crossing will be provided where the path crosses the temporary bypass road. North of the temporary bypass road, the path is located makai of two excavated ponds and the Waipouli Drainage Canal. This route will take the path mauka of the Fernandes Road residences and mauka of the Waipouli Town Center. Land in this area is owned by the Midler Family Trust and the County. Mauka views are especially notable given the wide, open view planes extending toward the Nounou Mountain (Sleeping Giant).

When the path reaches Uhelekawawa Canal, it will turn makai (east) and run along the south side of the canal. A new bridge, planned for construction between Waipouli Town Center and Kauai Village Shopping Center, will accommodate path users. North of Uhelekawawa Canal, the 12-foot wide path will cross over to the makai side of Kūhiō Highway via the signalized intersection at the driveway to Kauai Village Shopping Center.

Waipouli Resort Area to Uhelekawawa Canal Spur

A spur will connect the coastal resort area beginning north of Kauai Coast Resort at the Beachboy. This area is currently vacant, except for ResortQuest Kauai Beach at Makaiwa. The path will provide the public with lateral coastal access to Mokihana of Kauai. At that point, the path will turn mauka (west), and use a mauka-makai County easement to reach Kūhiō Highway. The path will run alongside the highway from Snorkel Bob's, cross Uhelekawawa Canal, then converge with the primary alignment in front of Waipouli Beach Resort. A new bridge will be needed to span Uhelekawawa Canal.

Waipouli Beach Resort to Ala Road

The primary path alignment will cross to the makai side of Kūhiō Highway aided by the existing traffic signal at the Kauai Village Shopping Center. The path will continue past the Waipouli Beach Resort, where the path will be incorporated into the resort’s frontage.

From Waipouli Beach Resort to Ala Road, a 700-foot long block, the bike/pedestrian path will be located between the highway and existing residences and condominiums. The path would have to fit within the highway right-of-way, unless a strip of private property is acquired along the highway frontage.

Niulani Street and Moanakai Road to Waika‘ea Canal

The path will turn onto Ala Road (heading makai), then onto Niulani Street, which runs parallel to the coastline. Niulani Street services a residential area and traffic is very light. It is a privately owned road, except for approximately 150 feet on the north end that is owned by the County. The privately owned section is unpaved and poorly maintained. The scope of this project includes acquisition of the privately owned road by the County, and its conversion to a bike/pedestrian-priority roadway in which motor vehicles are limited to local traffic. An existing beach access off Niulani Street, north of Kapa‘a Shores Resort, is to be improved.

At the northern end of Niulani Street, the path will turn onto Keaka Road, heading makai for a short distance, then north on Moanakai Road. The path will travel the length of Moanakai Road, terminating at Waika‘ea Canal in Lihi Park, where it will merge with the Kapa‘a-Keālia bike/pedestrian path. Single-family houses line the mauka side of Moanakai Road and the makai side fronts directly on the ocean, including a popular beach known as Baby Beach or Fuji Beach. A 900-foot long revetment stabilizes the southern portion of Moanakai Road, from Keaka Road to Makaha Road. The road carries two-way traffic and parallel parking is allowed between the road and the revetment. Moanakai Road ends approximately 400 feet south of the canal. From this point, the beach and back beach areas widen and transition into a parking area and park land.

At present, there is insufficient room to accommodate the path on Moanakai, which has a 40-foot right-of-way. Locating the bike/pedestrian path along Moanakai Road will be coordinated with changes in traffic flow. Moanakai will be changed to a one-way road northbound, which would maintain one travel lane for vehicles and on-street parking, while creating space for the bike/pedestrian path. Fifteen lots on the mauka side of Moanakai will be affected by this change. All other streets in the subdivision, including cross streets, will continue to carry two-way traffic. If the County Council does not approve the one-way traffic proposal, Moanakai Road would become a signed shared roadway with signs identifying it as a preferred route for bicyclists and pedestrians.

Figure S1
Build Alternative: Lydgate Park-Kapaa (11x17)

Figure S1
Build Alternative: Lydgate Park-Kapaa (11x17) (back)

Wailua House Lots Phase

The objective of the Wailua House Lots Phase is to connect the residents of this large subdivision with the primary north-south alignment from Lydgate Park to Kapa‘a. A 12-foot wide shared use path will be constructed on the north side of Wailua House Lots using the alignment of a former cane haul road (see Figure S2). The road is part of the Midler Family Trust land holdings. Although the cane haul road is unpaved, it is graded, free of heavy vegetation, and away from driveways and cross streets. Users will be able to access the path from the residential subdivision through Eggerking Road, which runs through the center of the subdivision.

The makai end of the Wailua House Lots path will intersect with the Lydgate Park-Kapa‘a path near the Bambulei store. The shared use path will extend as far mauka as Eggerking Road. There will be signed-shared route to the Wailua House Lots Park via Eggerking Road and Nonou Road. Because the internal residential streets have traffic levels and posted speed limits that are both relatively low, AASHTO guidelines indicate that a shared use road facility would be adequate. Signs will be posted to increase awareness of bicycles sharing the road with automobiles. Roadways will be widened or shoulders paved where it is possible to do so without requiring reconstruction of the drainage system.

Kawaihau Phase

The County previously installed an interim path on the south side of Kawaihau Road from Kapa‘a Elementary to Kapahi Park. Although this path is well-used by residents, its utility will increase when connected to Kapa‘a town and the coastal shared use path.

The Kawaihau Phase involves construction of a 10-12-foot shared use path through the gulch located between Hundley Heights and Mahelona Hospital (see Figure S3). The pathway will be designed in a switchback pattern so that the maximum grade is generally less than 5%, in compliance with the ADA guideline.

The makai end of the path will travel along the north side Kawaihau Road and connect with the Kapa‘a-Keālia path. The intersection of Kawaihau Road and Kūhiō Highway is currently unsignalized. If warranted, in accordance with the latest Manual of Uniform Traffic Control Devices, a user-activated crossing signal may be provided until a permanent traffic signal is installed. A determination will be made during the final design phase of the project.

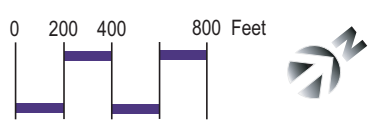
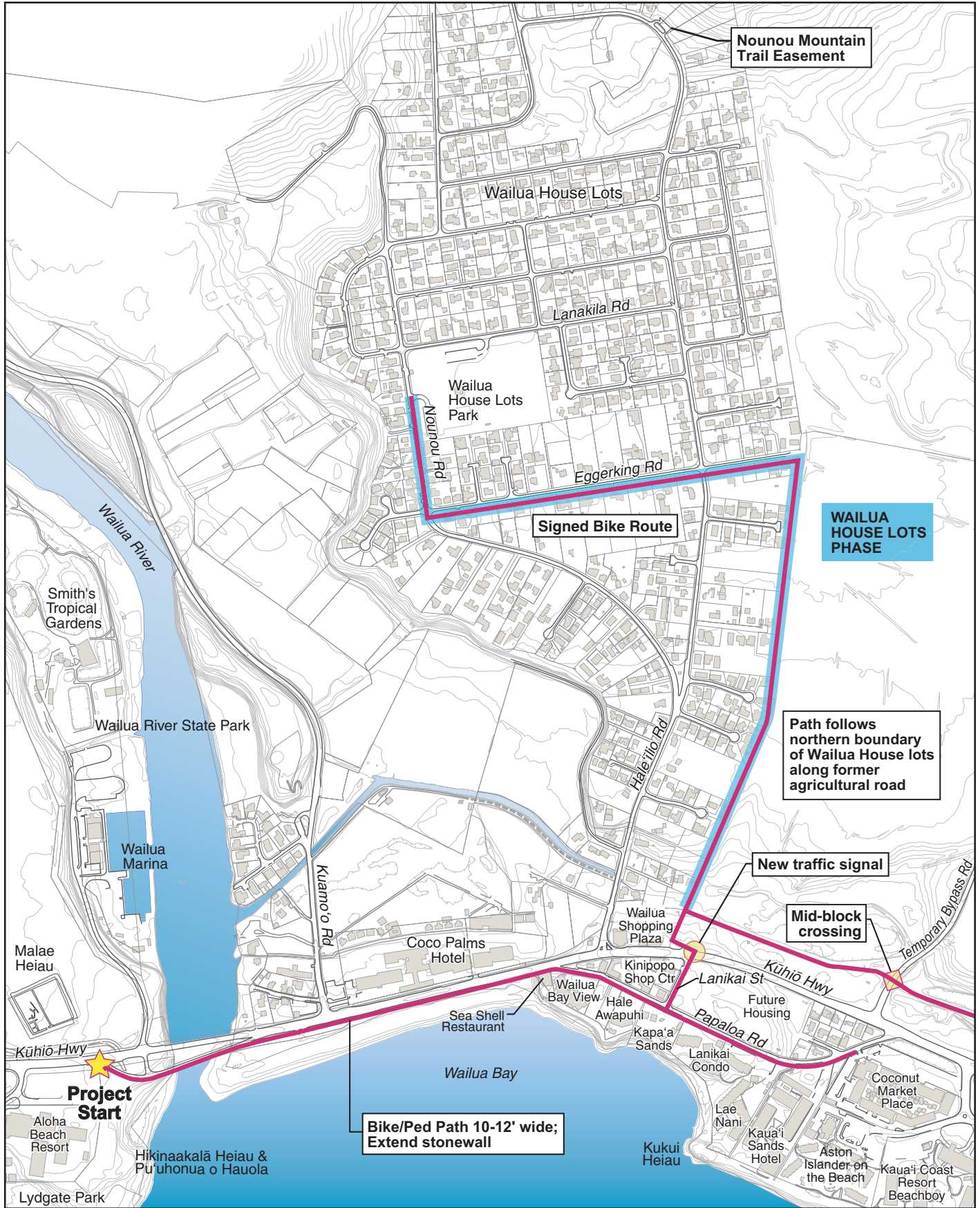


Figure **S2**
Build Alternative: Wailua House Lots

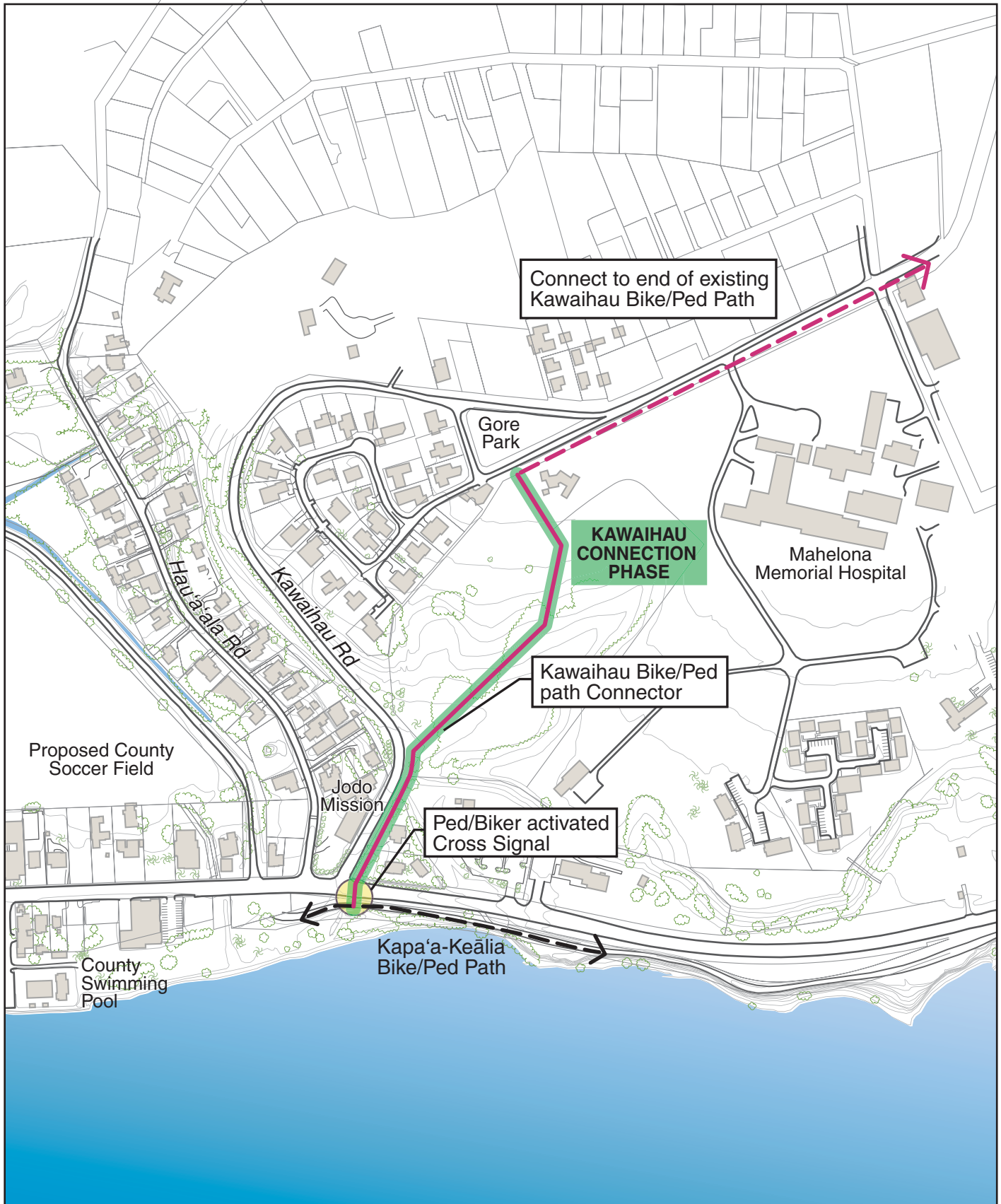


Figure **S3**

Build Alternative: Kawaihau

S5.3 Alternative Routes Examined in the DEA

Alternative routes were developed through a participatory process. The County Department of Public Works (County DPW) hosted meetings in January and March 2004 that were open to all members of the community. (Full descriptions of both meetings are attached as Appendices E and F.) The first meeting included a mapping exercise during which participants were asked to draw possible alignments for bike/pedestrian paths and to annotate the map with other suggestions for non-motorized routes in the region. Alternatives were presented at the second meeting and additional feedback obtained. Project planners held numerous other meetings with elected officials, representatives of government agencies, members of business and civic organizations, and property owners to discuss project alternatives and concerns. The following alternatives were evaluated in the DEA.

Lydgate Park-Kapa‘a Alignment. The DEA evaluated three distinct alignments that highlighted different environmental and socio-cultural impacts (See Figure 7, page 3-19). The alternatives also enabled the County DPW to consider a range of routing possibilities that would meet the project’s purpose and need. The alternatives were developed with the understanding that the County DPW would be able to “mix and match” different components when selecting the preferred alignment.

Alternative 1, Shoreline Path, examined a bike/pedestrian path located along the coast to the extent possible. This concept reinforced the County’s interest in maintaining lateral beach access for the public and expanded the coastal orientation embodied in the Lydgate Park and Kapa‘a-Keālia Paths, as well as the overall vision of Ke Ala Hele Makalae. Consequently, the proposed path followed the shoreline from Wailua River to Uhelekawawa Canal, turning inland around the Kapaa Shores Condominium, then working back makai via Niulani Road and Moanakai Road to the northern end point at Waika‘ea Canal.

Alternative 2, Inland Roads Path, developed a route that would maximize use of the existing roadway system. This concept would give path users the most urban experience among the three alternatives, since the path was laid out adjacent to Kūhiō Highway and other side streets. Alternatives 1 and 2 were identical from the project start point to Seashell Restaurant. Alternative 2 continued north on Papaloa Road, going through Coconut Marketplace to Aleka Loop. A widened sidewalk adjacent to Kūhiō Highway was proposed from Snokel Bob’s to Ala Road. Alternative 2 (like Alternative 1) traversed Niulani Road and Moanakai Road to Waika‘ea Canal.

Alternative 3, Canal Path, proposed a shared use facility that would take advantage of the region’s canal system, an underutilized recreational and scenic resource. This concept would diversify the experience of Ke Ala Hele Makalae by taking users through a different

type of environment. After crossing Wailua River, Alternative 3 proposed a secondary path adjacent to the canal around Coco Palms, going across Hale‘Īlio Road, continuing on a former agricultural road through property owned by the Midler Trust, then along Waipouli Drainage Canal to Uhelekawawa Canal. Where existing development presses against the canal, leaving inadequate space for a shared use path, this alternative called for the path to travel on the mauka side of Kūhiō Highway. Additional mauka spurs were proposed along Waika‘ea Canal. The main alignment, however, would turn makai down Kaleloku Road to Lihi Park.

Wailua House Lots. Three alternatives were examined for the Wailua House Lots Phase (see Figure 8, page 3-22). Alternative W1, the northern perimeter route, was selected as the preferred alternative. Alternative W2 proposed a bike/pedestrian path on Hale‘Īlio Road. Alternative W3 proposed a longer loop with bike/pedestrian paths on Hale‘Īlio, Lanakila, and Nonou Roads. Although locating the path along interior roads would provide residents with more direct access, the full 10-12 foot path would require reconstructing the roadway and drainage systems which had been built to older, homestead standards. Instead, the County will add pavement to the sides of high-use streets to create “shoulders” for shared use.

Kawaihau. Three alternatives were examined for the Kawaihau Phase (see Figure 9, page 3-23). Alternative K3, the gulch route with switchbacks, was selected as the preferred alternative. Alternative K1 proposed improving the existing path around Hundley Heights. It is the shortest route, but contains steep sections that do not meet ADA slope guidelines. Alternatives K2 and K3 proposed routes through the gulch makai of Mahelona Hospital. However, K2 proposed a straight path, while K3 incorporated switchbacks to accommodate ADA slope restrictions.

S5.4 Alternatives Considered, but Eliminated Prior to the DEA

Two alternatives in the project corridor were considered, but eliminated before the DEA was prepared.

Around Hikinaakalā Heiau

Near the northern parking lot in Lydgate Park is a turnaround for the pedestrian/bike path. One consideration was to link this terminus to the bridge across Wailua River by establishing a route around the mauka perimeter of Hikinaakalā Heiau and Pu‘uhōnua o Hauola. This route would largely or entirely lie on a former railroad berm. The route was considered initially because of the possibility that some users would create their own shortcut from the Lydgate Park parking lot to the Wailua Bridge path, and the likelihood that the shortcut would go through the heiau following visible indications of a footpath. A

marked trail for bicycles and pedestrians outside the heiau might offer a way to provide access to the National Historic Landmark site while staying within a historic (rail) transportation right-of-way. However, informal discussion with officials from the Division of State Parks indicated that a path in close proximity to the heiau site would not be acceptable. Therefore, this option was not pursued. Instead, the southern terminus for the path is the cul-de-sac located mauka of the Aloha Beach Resort.

Wetland Areas

A network of bike/pedestrian paths were considered along canals and drainageways mauka of Kapa'a town. The properties in this area are owned by the County of Kaua'i, State Department of Land and Natural Resources, and the Midler Family Trust. Approximately 100 acres of the Midler Trust lands were recently acquired by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) for a conservation easement. Discussions with NRCS officials indicated that some of the paths would not be consistent with the wetland and habitat restoration objectives of the easement. However, NRCS supported a viewing trail along the northern boundary of the easement, where the path would be built on a raised agricultural road and accessible from Panihi Road.

In lieu of locating the bike/pedestrian path through wetlands on the mauka side of the Waipouli Drainage Canal, the alignment was relocated to the makai side, wherever there was sufficient space, for example, between Panihi Road and Kipuni Place and between Hoi Road and Uhelekawawa Canal. Alternative 3 (Canal Path) in the DEA avoided all wetlands. In some stretches, however, the current proposed path is located on existing roads or canal maintenance easements that pass through or alongside wetland areas, avoiding direct impacts on wetlands (i.e., there will be no loss of wetlands).

S6 IMPACTS AND MITIGATIONS

Table S-1 summarizes the environmental and social impacts of the No Build Alternative and the (Preferred) Build Alternative. A comparison of these two alternatives provides the greatest contrast in potential project-related impacts. A summary of mitigation measures for each adverse impact is also provided.

Table S-1
Summary of Environmental Impacts and Mitigations

| No Build Alternative | (Preferred) Build Alternative |
|---|---|
| LANDFORM AND SOILS | |
| <u>Immediate or Construction Impacts.</u> None. | <u>Immediate or Construction Impacts.</u> The project area is largely flat or gently sloping, with the exception of Kawaihau gulch. In this area, grading and slope modifications will be needed to construct the path and meet ADA guidelines to the extent practicable. |
| <u>Long-term or Operational Impacts.</u> None. | <u>Long-term or Operational Impacts.</u> None. |
| <u>Mitigation.</u> | <u>Mitigation.</u> On a localized basis, the path will be engineered to balance cut and fill areas to the extent practicable. Best Management Practices (BMPs) will be used during construction to minimize soil erosion. |
| FLORA | |
| <u>Immediate or Construction Impacts.</u> None. | <u>Immediate or Construction Impacts.</u> In some areas, vegetation will be cleared for path construction, but no threatened or endangered species will be affected. |
| <u>Long-term or Operational Impacts.</u> None. | <u>Long-term or Operational Impacts.</u> Care and maintenance will be needed to sustain any new landscaping that is installed as part of the project. |
| <u>Mitigation.</u> None required. | <u>Mitigation.</u> Path landscaping will be provided where appropriate and practicable, with preference given to the use of native vegetation and low-maintenance species. Details of the landscaping plan will be developed during the design phase. |
| FAUNA | |
| <u>Immediate or Construction Impacts.</u> None. | <u>Immediate or Construction Impacts.</u> No construction will occur in wetland areas. There will be no direct impact on the habitat of any threatened or endangered species. |
| <u>Long-term or Operational Impacts.</u> None. | <u>Long-term or Operational Impacts.</u> There will be no direct impact on any threatened or endangered species or its habitat. |
| <u>Mitigation.</u> None required. | <u>Mitigation.</u> No outdoor lighting will be installed for this project, therefore, seasonal migratory birds, such as the Newell's shearwater, will not be affected. |

| No Build Alternative | (Preferred) Build Alternative |
|---|---|
| NATURAL HAZARDS | |
| <u>Immediate or Construction Impacts.</u> None. | <u>Immediate or Construction Impacts.</u> Same as long-term impacts. |
| <u>Long-term or Operational Impacts.</u> None. | <u>Long-term or Operational Impacts.</u> Wailua River crossing and coastal sections of the path are located in the tsunami inundation zone; however, this project will not increase the base flood elevation. |
| <u>Mitigation.</u> None. | <u>Mitigation.</u> Warning signs will be posted informing path users of potential tsunami and high surf hazards. All path users will be required to follow evacuation orders or other instructions issued by civil defense authorities. |
| WATER RESOURCES | |
| <u>Immediate or Construction Impacts.</u> None. | <u>Immediate or Construction Impacts.</u> During construction, water resources may be impacted by erosion and sedimentation during grubbing, clearing, and earthmoving activities. |
| <u>Long-term or Operational Impacts.</u> None. | <u>Long-term or Operational Impacts.</u> None. |
| <u>Mitigation.</u> None. | <u>Mitigation.</u> Storm water runoff and erosion during project construction will be mitigated through BMPs and compliance with conditions of the NPDES permit. |
| SOLID WASTE AND HAZARDOUS MATERIALS | |
| <u>Immediate or Construction Impacts.</u> None. | <u>Immediate or Construction Impacts.</u> Construction activity is not expected to encounter or generate hazardous materials. However, the project will generate solid waste. |
| <u>Long-term or Operational Impacts.</u> None. | <u>Long-term or Operational Impacts.</u> Trash in receptacles on the path will require regular pick up. |
| <u>Mitigation.</u> None required. | <u>Mitigation.</u> Solid waste generated during construction will be properly handled and disposed of in accordance with State Department of Health requirements. General maintenance procedures will be followed to keep the path clean. |
| AIR QUALITY | |
| <u>Immediate or Construction Impacts.</u> None. | <u>Immediate or Construction Impacts.</u> During construction, fugitive dust emissions will be generated by activities such as earthmoving and material blown from stockpiles and exposed areas. |
| <u>Long-term or Operational Impacts.</u> None. | <u>Long-term or Operational Impacts.</u> To the extent that trips by bicycle or foot replace trips made by |

| No Build Alternative | (Preferred) Build Alternative |
|---|---|
| | motorized vehicles, carbon monoxide levels will improve in comparison to the No Build Alternative. |
| <u>Mitigation.</u> None required. | <u>Mitigation.</u> BMPs will be used to control fugitive dust, including frequent watering, use of windscreens in residential and commercial areas, and limiting areas of exposure. |
| NOISE | |
| <u>Immediate or Construction Impacts.</u> None. | <u>Immediate or Construction Impacts.</u> Construction will occur during daylight hours when occasional loud noises are more tolerable. Where needed, a Department of Health noise permit will be obtained. |
| <u>Long-term or Operational Impacts.</u> None. | <u>Long-term or Operational Impacts.</u> With few exceptions, the path will be restricted to non-motorized use so that noise levels will not increase substantially. |
| <u>Mitigation.</u> None required. | <u>Mitigation.</u> The contractor will be required to comply with all conditions stipulated in any noise permit and in the DOH community noise control standards. |
| VISUAL AND AESTHETIC RESOURCES | |
| <u>Immediate or Construction Impacts.</u> None. | <u>Immediate or Construction Impacts.</u> Temporary visual disturbance to landscape or streetscape during construction. |
| <u>Long-term or Operational Impacts.</u> None. | <u>Long-term or Operational Impacts.</u> In most areas, the path will be at grade and, therefore, present no visual obstructions. However, for safety and engineering reasons, structures such as retaining walls, boardwalks, and railings, may be needed in some locations, thereby introducing man-made elements into the landscape. |
| <u>Mitigation.</u> None required. | <u>Mitigation.</u> Structural components of the path will be kept at a minimum and, to the extent practicable, designed using natural materials and a streamlined profile to limit visual intrusions. Opportunities for public input will be provided during detailed engineering and design phase. |
| HISTORIC AND ARCHAEOLOGICAL RESOURCES | |
| <u>Immediate or Construction Impacts.</u> None | <u>Immediate or Construction Impacts.</u> Potential for inadvertent discovery of ancient burials during construction. Adverse impact to the historic integrity of Wailua Plantation Bridge when it is rehabilitated to provide a non-vehicular shared use lane. |

| No Build Alternative | (Preferred) Build Alternative |
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| <u>Long-term or Operational Impacts.</u> | <u>Long-term or Operational Impacts.</u> Permanent modifications to the Wailua Plantation Bridge. Potential for increased public traffic to cultural sites on State park land, south of Wailua River. |
| <u>Mitigation.</u> | <u>Mitigation.</u> The County DPW, FHWA, and SHPD have entered into a Memorandum of Agreement stipulating reburial procedures and documentation of Wailua Plantation Bridge. Consultation with the Kaua'i/Ni'ihau Island Burial Council prior to grading in shoreline areas, avoidance of burials where possible, and, where appropriate, implementation of approved burial treatment plan. To reduce inappropriate off-path activities in the vicinity of sensitive cultural sites, the County DPW will include landscaping, barriers (e.g., railings), and signage in the path design. The Division of State Parks will be consulted. |
| LAND USE | |
| <u>Immediate or Construction Impacts.</u> None. | <u>Immediate or Construction Impacts.</u> Potential for inconveniences to surrounding land uses. Disruptions will be temporary and last only as long as it takes to complete each section of the path. |
| <u>Long-term or Operational Impacts.</u> None. | <u>Long-term or Operational Impacts.</u> The path is located primarily on public lands (including rights-of-way, park areas, and canal maintenance easements). The project will not displace any residential or commercial use. |
| <u>Mitigation.</u> None required. | <u>Mitigation.</u> Property owners will be compensated for any private lands required by the project. |
| SOCIAL AND ECONOMIC | |
| <u>Immediate or Construction Impacts.</u> None. | <u>Immediate or Construction Impacts.</u> Project expenditures will temporarily boost the local economy, supporting short-term employment and local purchase of goods and services. |
| <u>Long-term or Operational Impacts.</u> None. | <u>Long-term or Operational Impacts.</u> Improvements will expand and enhance the transportation (bike/pedestrian) and recreational infrastructure of the community. |
| <u>Indirect, Secondary, or Cumulative Impacts.</u> None. | <u>Indirect, Secondary, or Cumulative Impacts.</u> Potential for new or expanded activity among businesses catering to path users. This project will not build or provide space for commercial or concessionaire activity. |

| No Build Alternative | (Preferred) Build Alternative |
|---|---|
| <u>Mitigation</u> . None required. | <u>Mitigation</u> . None required. |
| TRANSPORTATION | |
| <u>Immediate or Construction Impacts</u> . None | <u>Immediate or Construction Impacts</u> . In areas where the path is situated adjacent to an operational roadway, temporary traffic diversions may be needed around the construction area. However, access to businesses and residences will be maintained at all times. |
| <u>Long-term or Operational Impacts</u> . Without the project, bicyclists and pedestrians will continue to use existing roads and sidewalks, which typically do not provide sufficient space for shared use, continuity, or separation from vehicular traffic. In the case of bicycling, there is no urban facility for children, seniors, and novice riders. | <u>Long-term or Operational Impacts</u> . County to acquire Niulani Street and designate the roadway as a slow-speed, bike/pedestrian-priority roadway. Moanakai Road to be converted to a one-way road from Keaka Road to Panihi Road. |
| <u>Mitigation</u> . None | <u>Mitigation</u> . If necessary, a traffic plan will be developed prior to construction. Permanent changes in roadway operations require County Council approval, and conditions may be added at that time. |
| COMMUNITY SERVICES AND FACILITIES | |
| <u>Immediate or Construction Impacts</u> . None. | <u>Immediate or Construction Impacts</u> . None. |
| <u>Long-term or Operational Impacts</u> . None. | <u>Long-term or Operational Impacts</u> . Improved access for bicyclists and pedestrians to community facilities located along Kūhiō Highway, and to Wailua House Lots Park, and Kapa‘a Elementary/High School and Mahelona Hospital (Kawaihau). Annual expenditure of public funds needed for facility maintenance and upkeep. |
| <u>Indirect, Secondary, or Cumulative Impacts</u> . None. | <u>Indirect, Secondary, or Cumulative Impacts</u> . Potential increase in the need for related services, such as law enforcement and emergency medical service. |
| <u>Mitigation</u> . None. | <u>Mitigation</u> . None required. County has committed to operating and maintaining the path facility. |

S7 APPROVALS AND PERMITS

The following permits or approvals will be required prior to construction of the bike/pedestrian path.

The following government permits are required or potentially required to implement the proposed action:

- Department of Army Permit, Section 10, Rivers and Harbors Act
- Conservation District Use Permit, State Department of Land and Natural Resources
- National Pollutant Discharge Elimination System (NPDES) Permit, State Department of Health
- Construction Noise Permit and Variance, State Department of Health
- Consistency Review, Coastal Zone Management Act, State Office of Planning
- Special Management Area Permit, County of Kaua'i
- Shoreline Setback Variance, County of Kaua'i
- Flood Zone Permit, County of Kaua'i
- Roadway Operation Changes, Approval by County Council of Kaua'i

S8 COMMENTS AND COORDINATION

Project scoping activities consisted of written correspondence and meetings with relevant government agencies, landowners, and environmental organizations.

Two public information meetings were held as part of the project's planning process. The first meeting took place on the evening of January 29, 2004 at the Kapa'a Middle School cafetorium, and the second meeting was held on the evening of March 10, 2004 at the same location. Based on the number of people who signed in, there were 49 attendees at the first meeting and 69 attendees at the second. The first meeting included a brainstorming session in which participants were asked to identify potential alignments for bike/pedestrian paths. The second meeting focused on the short-list alternatives that would be studied in detail in the Environmental Assessment. Many of the participants at the second meeting were residents of condominiums located on Papalooa Road with questions and comments related to a proposed shoreline alignment on the makai side of their properties. (See Appendices E and F for a complete record of the first and second public meetings, respectively.)

Members of the Kaua'i County Council were also informed about the status of the project and alternatives under consideration at a briefing on June 3, 2004. The session was listed on the Council agenda and open to the public.

Availability of the DEA was announced in the June 8, 2004 issue of the OEQC *Environmental Notice*, which initiated a 30-day public comment period that ended on July 7, 2004. Copies of the DEA were mailed to federal, State, and County agencies; elected officials; and others who may have had an interest in the project. In addition, copies of the DEA were mailed to the Kapa‘a Public Library, Līhu‘e Regional Library, and Kaua‘i Community College Library. All parties who were sent the DEA were asked to provide comments. Additional publicity was provided by a news article published in the June 27, 2004 edition of the *Garden Island News*.

A third public meeting was held on July 1, 2004 at Kapa‘a Middle School. This meeting was specifically scheduled during the DEA public review period to enable members of the public to seek additional information about the project and/or provide comments. An estimated 61 people attended this meeting. Following a brief slideshow presentation, the floor was opened for discussion. Verbal comments were summarized on flip chart paper by a professional recorder. Sheets were posted on the walls of the cafetorium so that speakers could correct or revise their comments, and the audience could recall the flow of the discussion. (See Appendix G for complete documentation of the meeting.) In addition to the verbal comments, attendees were invited to submit written comments on the forms provided—either at the meeting or mailed in after the meeting.

In total, 43 sets of written comments were received on the DEA. Project planners provided responses to all written comments received during the public review period. Some of the comments led to changes in the EA in the form of clarification, correction, or new information. All agency and public comments on the DEA and responses have been reproduced as part of Chapter 10, Consultations and Comments.

S9 FINDING OF NO SIGNIFICANT IMPACT

In accordance with HRS Chapter 343 and HAR Chapter 200, the County DPW and State DOT have rendered a Finding of No Significant Impact (FONSI) for the proposed Lydgate Park- Kapa‘a Bike/Pedestrian Path based on an assessment of project impacts in relation to the Significance Criteria specified in HAR 11-200-12(b). Comments on the DEA from agencies and the public were considered in the determination made by the respective agencies. A summary of the FONSI assessment is provided in Table S-2. There is a detailed discussion of each criterion in Chapter 8.

The FHWA anticipates issuing a FONSI after the 30-day availability period has passed and comments have been reviewed.

Table S-2
Summary Assessment of Project Impacts in Comparison to Significance Criteria

| Criterion (from HAR 11-200-12(b)) | Significant |
|--|--------------------|
| Involves an irrevocable commitment to loss or destruction of any natural or cultural resource | No |
| Curtails the beneficial uses of the environment | No |
| Conflicts with the State’s long-term environmental policies or goals and guidelines expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders | No |
| Substantially affects the economic or social welfare of the community or State | No |
| Substantially affects public health | No |
| Involves substantial secondary impacts | No |
| Involves substantial degradation of environmental quality | No |
| Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions | No |
| Substantially affects a rare, threatened or endangered species, or its habitat | No |
| Detrimentially affects air or water quality or ambient noise levels | No |
| Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a floodplain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, freshwater, or coastal waters | No |
| Substantially affects scenic vistas and viewplanes identified in county or state plans or studies | No |
| Requires substantial energy consumption | No |

Notes: “No” means the project impact as it pertains to the criterion is considered to be not significant and, therefore, an EA is the appropriate environmental review document, as provided in HRS Chapter 343. “Yes” would mean the project impact as it pertains to the criterion is considered to be significant and, therefore, an environmental impact statement would be the appropriate review document under HRS Chapter 343.

S10 SECTION 4(f) EVALUATION

Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966 (49 USC §303(c)) declares that “it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public parks and recreational lands, wildlife and waterfowl refuges and historic sites.”

Section 4(f) resources in the project area include two public parks—Wailua Beach Park and Lihi Park (or Waipouli Beach Park) and the Wailua Plantation Bridge, a bridge that is potentially eligible for the National Register of Historic Places. Programmatic Section 4(f) evaluations were prepared for the use of these resources, as permitted by the following FHWA documents:

- Negative Declaration/Section 4(f) Statement for Independent Bikeway or Walkway Construction Projects

The current project will construct a bikeway/walkway that is independent of any transportation project. Although park land will be used, the facility is consistent with the intended recreational purposes of the park and provide a net benefit to park users.

- Nationwide Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges

To cross Wailua River, the project will modify the Wailua Plantation (cane haul) Bridge. The County DPW and FHWA have entered into a Memorandum of Agreement with the State Historic Preservation Division to produce a written and photographic record of the bridge according to accepted standards.

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