May 11, 2022

TO: Ms. Mary Alice Evans  
   Director, Office of Planning and Sustainable Development  
   Environmental Review Program

FROM: Edward S. Ige  
   Facilities Director, Facilities Development Branch

SUBJECT: Draft Environmental Assessment and Anticipated Finding of No Significant Impact  
   Prince Jonah Kuhio Kalanianaole Elementary & Intermediate School  
   Covered Playcourt  
   Job No.: Q11201-18  
   Tax Map Key: (3) 2-7-002, 003 & 2-7-025: 004

The State of Hawaii Department of Education has reviewed the Draft Environmental Assessment and Anticipated Finding of No Significant Impact (DEA-AFONSI) for the proposed Prince Kuhio Kalanianaole Elementary & Intermediate School situated on Tax Map Key parcel (3) 2-7-002, 003 & 2-7-025: 004 on the Island of Hawaii, for publication in the next available edition of The Environmental Notice.

The project will provide a covered play court facility where students can engage in outdoor play and be protected from inclement weather and high outdoor temperatures. The structure also will serve as a covered, multi-purpose facility for school activities and functions.

The Final Environmental Assessment and FONSI will be uploaded to the Environmental Review Program website.

We have uploaded an electronic copy of this letter, the publication form, and the DEA-AFONSI to your online submittal site.
Should you have any questions, please contact George Ramiscal, Project Coordinator of the Facilities Development Branch, of our Facilities Development Branch at (808) 784-5132 or email at gramiscal@bowersandkubota.com.

ESI:gr

c: Facilities Development Branch
<table>
<thead>
<tr>
<th>Action Name</th>
<th>Prince Jonah Kuhio Kalnianaole Elementary and Intermediate School Covered Play Court</th>
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<tr>
<td>Type of Document/Determination</td>
<td>Final environmental assessment and finding of no significant impact (FEA-FONSI)</td>
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<td>HRS §343-5(a) Trigger(s)</td>
<td>(1) Propose the use of state or county lands or the use of state or county funds</td>
</tr>
<tr>
<td>Judicial district</td>
<td>South Hilo, Hawai‘i</td>
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| Tax Map Key(s) (TMK(s)) | [3] 2-7-022: 002, 003  
[3] 2-7-025: 004 |
| Action type | Agency |
| Other required permits and approvals | Variance from Pollution Control, Disability and Communication Access Board, Chapter 6E Review, Plan Approval, Building Electrical and Plumbin Permit, Grubbing Grading and Stockpiling Permit |
| Proposing/determining agency | Department of Education |
| Agency contact name | George Ramiscal |
| Agency contact email (for info about the action) | gramiscal@bowersandkubota.com |
| Email address or URL for receiving comments | gramiscal@bowersandkubota.com |
| Agency contact phone | (808) 784-5132 |
| Agency address | Queen Liliuokalani Facilities Campus  
3633 Waialae Avenue, Building B, Room 201  
Honolulu, HI 96816  
United States  
[Map It](#) |
| Was this submittal prepared by a consultant? |
**Consultant**
- Gerald Park Urban Planner

**Consultant contact name**
- Gerald Park

**Consultant contact email**
- gpark@gpup.biz

**Consultant contact phone**
- (808) 625-9626

**Consultant address**
- 95-595 Kanamee Street #324
  - Mililani, HI 96789
  - United States
  - Map It

### Action summary
The Department of Education, State of Hawai‘i, proposes to construct a multi-purpose covered play court at Prince Jonah Kūhiō Kalaniana‘ole Elementary & Intermediate School. An existing outdoor play court will be demolished and replaced on the same site with a single-story structure.

The approximately 10,200 square feet (117’-2” X 87’-0”) structurer will provide one standard size high school basketball court, two “biddy” basketball courts, and two standard high school sized volleyball courts. The height of the structure is approximately 30’-6” measured from grade to top of roof.

Chain link fencing (10-feet high) around the exterior will provide ventilation and physical and visual security. The exterior finish will consist of protective metal siding and translucent fiberglass panels installed above the chain link fencing.

Construction costs are estimated at $4.0 million and will be funded by the State of Hawai‘i.

### Reasons supporting determination
See Final Environmental Assessment, Section 7 Determination of Significance

### Attached documents (signed agency letter & EA/EIS)
- Prince-Kudio-Elementary.pdf

### Shapefile
- The location map for this Final EA is the same as the location map for the associated Draft EA.

### Action location map
- Kalanianaole-Elem-School-Figure-1-Vicinity-Map.zip

### Authorized individual
- Gerald Park
Authorization

- The above named authorized individual hereby certifies that he/she has the authority to make this submission.
FINAL ENVIRONMENTAL ASSESSMENT

PRINCE JONAH KŪHIŌ KALANIANA‘OLE ELEMENTARY AND INTERMEDIATE SCHOOL COVERED PLAY COURT
Pahailoa and Ka‘apōko, District of South Hilo, Island, County, and State of Hawai‘i

Prepared for
Department of Education, State of Hawai‘i
Office of Facilities and Operations
Facilities Development Branch
Project Management Section
3663 Waialae Avenue
Honolulu, Hawai‘i 96816

Pepeluali 2022
FINAL ENVIRONMENTAL ASSESSMENT

PRINCE JONAH KŪHIŌ KALANIANAʻOLE ELEMENTARY AND INTERMEDIATE SCHOOL COVERED PLAY COURT
Pahailoa and Kaʻapōko, District of South Hilo, Island, County, and State of Hawai‘i

Prepared in Partial Fulfillment of the Requirements of Chapter 343, Hawai‘i Revised Statutes and Title 11-200.1 Hawai‘i Administrative Rules, Department of Health, State of Hawai‘i

Prepared for

Department of Education, State of Hawai‘i
Office of Facilities and Operations
Facilities Development Branch
Project Management Section
3663 Waialae Avenue
Honolulu, Hawai‘i 96816

Prepared by

Gerald Park Urban Planner
95-595 Kaname‘e Street No. 324
Mililani, Hawai‘i 96789

And

Design Partners, Inc.
1580 Makaloa Street, Suite 1100
Honolulu, Hawai‘i 96814

Pepeluali 2022
## PROJECT PROFILE

| Proposed Action:       | Prince Jonah Kūhiō Kalanianaʻole Elementary & Intermediate School Covered Play Court  
                      | DOE Job No. Q11201-18 |
|-----------------------|-------------------------------------------------------------------------------------------------|
| Location:             | Pahailoa and Kaʻapōko, District of South Hilo, County of Hawaiʻi |  
| Street Address:       | 27-330 Mamalahoa Highway  
Pāpaʻikou, Hawaiʻi 96781 |  
| Proposing/Determining Agency: | Department of Education  
                      | Office of Facilities and Operations  
                      | Facilities Development Branch  
                      | Project Management Section  
                      | 3633 Waialae Avenue  
                      | Honolulu, Hawaiʻi 96816 |  
| Tax Map Key:          | [3] 2-7-022: 002, 003  
                      | [3] 2-7-025: 004 |  
| Land Area:            | 10.778 acres |  
| Landowner:            | State of Hawaiʻi (parcels 002 and 004)  
                      | County of Hawaiʻi (parcel 003) |  
| Existing Use:         | Public Elementary School |  
| State Land Use Designation: | Urban |  
| County of Hawaii General Plan | Low Density Urban |  
| Zoning:               | RS-7.5 (Residential 7,500 sf minimum lot area) |  
| Special Management Area: | Outside Special Management Area |  
| Need for Assessment:  | Chapter 343, Hawaiʻi Revised Statutes  
                      | §343-5 (a) (1) Propose the use of state or county ands or the use of state or county funds. |  
| Determination:        | [Anticipated] Finding of No Significant Impact |  
| Contact Person:       | Jolene Velasco, Project Coordinator  
                      | Hawaiʻi Department of Education  
                      | Office of Facilities & Operations  
                      | Facilities Development Branch  
                      | Project Management Section  
                      | 3633 Waialae Avenue  
                      | Honolulu, Hawaiʻi 96816 |  

T: 784-5129  
E: jolene.velasco@k12.hi.us  

**Note:** Substantive revisions to the text of the Draft Environmental Assessment are in **bold italic** type. Deleted text is in brackets with a [strikethrough].
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**EXHIBIT B** *Draft Environmental Assessment Comments and Responses*
DESCRIPTION OF THE PROPOSED PROJECT

The Department of Education, State of Hawai‘i, proposes to construct a multi-purpose covered play court at Prince Jonah Kūhiō Kalaniana‘ole Elementary & Intermediate School located in Pahailoa and Ka‘apōko, District of South Hilo, County and State of Hawai‘i. Prince Jonah Kūhiō Kalaniana‘ole Elementary and Intermediate School (“KEIS or “School”) is bounded by Mamalahoa Highway to the north and east, residences to the south, and Old Government Main Road and Homestead Road and residences to the west. A Vicinity Map is shown as Figure 1.

The 10.778 acre School property comprises three tax parcels identified as Tax Map Key [3] 2-7-022: 002, 003 and [3] 2-7-025: 004. Parcels 002 and 004 are owned by the State of Hawai‘i and parcel 003 by the County of Hawai‘i. Old Government Main Road separates parcel 004 from the main campus. A Tax Map is shown as Figures 2a and 2b.

Within the School campus, the existing outdoor court is bounded by a small parking area and Building E (Shop) to the north, Building A (Classrooms) on the east, Building I (Cafeteria) on the south, and Old Government Main Road and residences on the west. A Campus Map is shown as Figure 3.

A. Purpose and Need for the Project

The project will provide a covered facility where students can engage in outdoor play during inclement weather and high outdoor temperatures. The structure also will serve as a covered, multi-purpose facility for school activities and functions.

B. Technical Characteristics

1. Demolition

The project limit for construction is approximately 18,000 square feet which includes an existing outdoor basketball court, lawn areas around the new court, and small sections of the existing parking lot. For this assessment, the term building site is equivalent to the “footprint” of the new covered play court.

There are no structures per se to be demolished. Existing improvements to be demolished or removed are shown on Sheet C-2 and generally include:

- The existing basketball court, basketball backboards, and support poles
- Asphalt concrete pavement
- A 3-inch water line

2. Covered Play Court

As shown on Sheet C-3 The rectangular-shaped covered play court is oriented north / south along its length and will be constructed on the site of the existing basketball court and sections of adjoining lawn.
A single-story structure with a building footprint of approximately 10,200 square feet (117'-2" X 87'-0") under roof is proposed. The play court area is approximately 7,488 square feet (104' X 72' end to end). One standard size high school basketball court (84'-0" X 50'-0"), two "biddy" basketball courts (60'-0" X 40'-0"), and two standard high school sized volleyball courts (60'-0" X 30'-0") will be provided (See Sheet A-101). The courts will overlap each other and striped with different color markings. The floor will be asphalt concrete with a textured surface. Finish floor elevation is set at 215 feet.

The structure will be erected on a poured in place concrete foundation or footings, framed with a pre-engineered, pre-fabricated rigid steel structure, and topped with a pitched metal roof. The court floor will be an asphalt concrete surface on imported granular structural fill and aggregated base course. Chain link fencing (10-feet high) around the exterior will provide ventilation and physical and visual security. Chain link gates will be provided at convenient locations. Elevations and Sections are shown as Sheets A201 and A301, respectively.

The exterior finish will consist of protective metal siding and translucent fiberglass panels. The siding and panels will be installed above the chain link fencing.

Bird netting will be installed over the chain link fencing, under the roof eaves, and attached to the interior of the roof structure over the play court.

The height of the structure is approximately 30'-6" measured from grade to top of roof. It does not exceed the 35-foot building height limit for the RS-7.5 zoning district. **The structure is considered an accessory structure. It exceeds the 20-foot height limit for accessory structures and a Variance to the height limit will be requested.**

A 5'-0" concrete walkway will be constructed around the perimeter of the covered court in lieu of landscaping.

3. Circulation and Off-Street Parking

Changes to on-campus vehicle circulation and parking configurations are not proposed. Short-term modifications may be required during construction to accommodate school parking and construction vehicle and equipment access, movement, and parking.

4. Grading

The building site does not require extensive grading as the site is relatively level. Areas disturbed by construction will be restored to pre-construction condition or better. A Grading Plan is shown as Sheet C-4.

5. Infrastructure

Domestic water will be supplied from a new 1" waterline connecting to a 3" waterline on the southern end of the existing play court.

Earthen swales will be constructed on the east and west sides of the play court to collect and convey surface and roof runoff into drywells. The drywells are located on the south side of the play court, one on each side. The drywells may be pre-cast or constructed in place.
Restroom facilities are not proposed.

Electrical power will be routed in underground conduits from an electrical room in the Cafeteria (Building I).

6. Fire Protection

The structure will be equipped with a fire alarm system. Access for a fire apparatus is already available and a fire hydrant is nearby.

C. Economic Characteristics

Construction costs are estimated at $4.0 million and will be funded by the State of Hawai‘i. Construction is projected to commence in December 2023 and take about 10 months to complete.

The School property is owned by the State of Hawai‘i and the County of Hawai‘i.

D. Social Characteristics

The occupant capacity of for the structure is 150 persons.

Additional school staffing is not required. Use of the play court by grade level, day, and time will be scheduled by teachers and school administrators. Custodial staff will maintain the structure and open and secure the facility daily.
Figure 1
Vicinity Map
Prince Jonah Kūhiō Kalanianaʻole Elementary
& Intermediate School Covered Play Court

Prince Jonah Kūhiō Kalanianaʻole Elementary
& Intermediate School

Source: Google Maps 2012 Aerial.

Department of Education, State of Hawaiʻi
Figure 2
Tax Map
Prince Jonah Kūhiō Kalaniana'ole Elementary & Intermediate School
Covered Play Court

Source: County of Hawai‘i, Planning Department, Tax Maps.
Figure 3
Campus Map
Prince Jonah Kūhiō Kalaniana'ole Elementary & Intermediate School Covered Play Court
## Gate Schedule (Additive Alternate No. 1)

<table>
<thead>
<tr>
<th>Gate No.</th>
<th>Room Name (WxH)</th>
<th>Width (Ft)</th>
<th>Height (Ft)</th>
<th>Door Frame</th>
<th>Head</th>
<th>Jamber</th>
<th>Thrust</th>
<th>Remarks</th>
<th>Addendum Notes</th>
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<tbody>
<tr>
<td>1A</td>
<td>PLAYCOURT</td>
<td>4'0&quot; x 10'0&quot;</td>
<td>X1 CLG 3 x X GUF</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.0</td>
<td></td>
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<tr>
<td>1B</td>
<td>PLAYCOURT</td>
<td>4'0&quot; x 10'0&quot;</td>
<td>X1 CLG 3 x X GUF</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.0</td>
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<td>1C</td>
<td>PLAYCOURT</td>
<td>4'0&quot; x 10'0&quot;</td>
<td>X1 CLG 3 x X CLF</td>
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<td>-</td>
<td>-</td>
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<td>1.0</td>
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<tr>
<td>1D</td>
<td>PLAYCOURT</td>
<td>4'0&quot; x 10'0&quot;</td>
<td>X1 CLG 3 x X GUF</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.0</td>
<td></td>
</tr>
</tbody>
</table>

### Gate Types

- Metal Panel
- Panic Hardware

### Gate Schedule Notes

1. **GATE TYPES**
   - PLAYCOURT:
     - CLG: Chain Link Gate
     - CLF: Chain Link Fence
   - BACKBOARD:
     - TYP.: Metal Panel
     - TYP.: Protective Siding
   - PLAYCOURT:
     - TYP.: Metal Panel
     - TYP.: Protective Siding

2. **FACADE & FLOOR:**
   - TYP.: Steel, Painted
   - TYP.: Smokey Acrylic Paint System

3. **FRAME CONSTRUCTION:**
   - TYP.: Wood (50%)
   - TYP.: Chain Link Fence

4. **HARDWARE GROUP:**
   - SEE SPECIFICATIONS, SECTION B777

5. **Construction:**
   - TYP.: Steel, Painted
   - TYP.: Smokey Acrylic Paint System

6. **HARDWARE:**
   - SEE SPECIFICATIONS, SECTION B777

7. **REMARKS:**
   - PROVIDE SIGNAGE AS REQUIRED PER 2001 BC
   - PANIC HARDWARE
   - HARDWARE WILL BE REQUIRED TO LATCH DEVICES

8. **ADDITIONAL NOTES:**
   - THE ACTUATING PORTION OF THE RELINING DEVICE SHALL EXTEND AT LEAST ONE-HALF OF THE DOOR LEAF WIDTH.
   - THE MAXIMUM UNLATCHING FORCE SHALL NOT EXCEED 15 POUNDS (70 N).
EXTERIOR ELEVATION - NORTH

- Eave Height: 8'-0".
- Provide Metal Panels (Protection from Panic Hardware Tampering), TYP.
- Install Bird netting over chain-link fence and gates, TYP.
- Provide Metal Panels (Protection from Panic Hardware Tampering), TYP.
- Rigid Frame (TYP).
- Exterior Light fixture, TYP. See Elec. Drags.

EXTERIOR ELEVATION - SOUTH

- Eave Height: 8'-0".
- Provide Metal Panels (Protection from Panic Hardware Tampering), TYP.
- Install Bird netting over chain-link fence and gates, TYP.
- Provide Metal Panels (Protection from Panic Hardware Tampering), TYP.
- Rigid Frame (TYP).
- Exterior Light fixture, TYP. See Elec. Drags.

EXTERIOR ELEVATION - WEST

- Eave Height: 8'-0".
- Provide Metal Panels (Protection from Panic Hardware Tampering), TYP.
- Install Bird netting over chain-link fence and gates, TYP.
- Provide Metal Panels (Protection from Panic Hardware Tampering), TYP.
- Rigid Frame (TYP).
- Exterior Light fixture, TYP. See Elec. Drags.

EXTERIOR ELEVATION - EAST

- Eave Height: 8'-0".
- Provide Metal Panels (Protection from Panic Hardware Tampering), TYP.
- Install Bird netting over chain-link fence and gates, TYP.
- Provide Metal Panels (Protection from Panic Hardware Tampering), TYP.
- Rigid Frame (TYP).
- Exterior Light fixture, TYP. See Elec. Drags.

EXTERIOR FINISH SCHEDULE

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<th>DESCRIPTION</th>
<th>PRODUCT/COLO/NUM/COND</th>
<th>REMARKS</th>
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<td>□</td>
<td>EXPOSED FASTENER METAL ROOFING</td>
<td>TO BE SELECTED BY THE ARCHITECT</td>
<td>FACTORY FINISH STANDARD COLOR</td>
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<tr>
<td>□</td>
<td>EXPOSED FASTENER METAL SIDING</td>
<td>TO BE SELECTED BY THE ARCHITECT</td>
<td>FACTORY FINISH STANDARD COLOR, BOTH SIDES, FRONT AND BACK</td>
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<tr>
<td>□</td>
<td>HIGH PERFORMANCE PAINT</td>
<td>TO BE SELECTED BY THE ARCHITECT</td>
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<tr>
<td>□</td>
<td>LONG LIFE OUTLET SOUTHS</td>
<td>TO BE SELECTED BY THE ARCHITECT</td>
<td>ALL EXPOSED PRIMARY STEEL STRUCTURAL MEMBERS</td>
</tr>
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</table>

NOTE:
- All exposed structural members including roof, frame, Ortiz and frige shall be provided with high performance coating.

ARCHITECT: KALAMAANOE ELEM. & INTER SCHOOL, COVERED PLAYGROUND
DESCRIPTION OF THE AFFECTED ENVIRONMENT

A. Background Information

"Established in 1884, Prince Jonah Kūhiō Kalaniana'ole Elementary & Intermediate School boasts a long and proud history centered on the hard work and values that were prevalent in the plantation era of Hawai'i. A combination of the former Pāpa'ikou, Pepe'ekeo, Honomū, and Hakalau schools, our school was named to honor the statesman and Prince Jonah Kūhiō Kalaniana'ole in 1924, two years after his death.

The school has a long tradition of providing a learning environment for preschoolers through eight graders on one campus for the neighboring communities of Honoli'i, Pauka'a, Papaikou, Pepe'ekeo, Honomū, and Hakalau".

Existing structures are identified in Table 1.

Table 1. Structures at KEIS

<table>
<thead>
<tr>
<th>Building</th>
<th>Use</th>
<th>Area (sf)</th>
<th>Floors</th>
<th>Year Built</th>
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<tbody>
<tr>
<td>A</td>
<td>Classroom</td>
<td>21,254</td>
<td>2</td>
<td>1921</td>
</tr>
<tr>
<td>B</td>
<td>Kindergarten</td>
<td>3,700</td>
<td>1</td>
<td>1926</td>
</tr>
<tr>
<td>D</td>
<td>Classroom</td>
<td>12,618</td>
<td>1</td>
<td>1945</td>
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<tr>
<td>E</td>
<td>Shop</td>
<td>3,770</td>
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<td>F</td>
<td>Restroom</td>
<td>704</td>
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<td>1960</td>
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<tr>
<td>H</td>
<td>Classroom</td>
<td>14,748</td>
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<td>1971</td>
</tr>
<tr>
<td>I</td>
<td>Cafeteria</td>
<td>5,968</td>
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<td>1975</td>
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<tr>
<td>J</td>
<td>Band / Art</td>
<td>5,363</td>
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<td>1980</td>
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The School is part of the Department of Education's Hawai'i District Hilo-Waiakea Complex Area. The Complex Area is further separated into the Hilo Complex, Laupahoehoe Complex, and Waiakea Complex. The School is part of the Hilo Complex which includes de Silva, Haahdeo, Hilo Union, Kapiolani, Kaumana, and Keaukaha Elementary Schools. Hilo Intermediate, Kalaniana'ole, and Hilo High Schools are upper level schools in the complex. In general, elementary schools "feed" students into the Intermediate Schools which "feed" students into High School.

Enrollment for school year 2020-2021 totaled 274 students from Kindergarten to Grade 8. The design enrollment is 550 students (DOE, 2021). School staff consists of 3 administrators, 2 counselors, and 25 educators.

1KEIS School Status and Improvement Report, School Year 2019-20.
The site of the proposed project is a well-maintained lawn bounded by Buildings D, E, I, and Old Mamalahoa Highway. The existing play court is shown on Photograph 1.

![Photograph 1. Existing Outdoor Court Looking West](image)

**B. Environmental Characteristics**

1. **Surrounding Conditions / Features**

Located in the village of Pāpa'ikou, the School is bounded by residential uses on the north, west, and south with large agricultural lots (20 acre lots) to the east across the Hawai‘i Belt Highway. Old Mamalahoa Highway cuts through the School on the west separating a lot and Building J from the rest of the campus.

2. **Climate**

   Rainfall for this section of the South Hilo District averages about 160 inches annually. The entire district receives almost daily rainfall contributing to the greenery and lush vegetation. Orographic influence of the mountains and trade winds are the principal reasons for the heavy rainfall. The prevailing wind is the trade wind that blows from the north-northeast direction. September is the warmest month (81.4°F) and January / February the coolest (61.2°F). April, May, and December are the most comfortable months.

3. **Topography**

   The school property has been modified by site work, buildings, walkways, impervious pavements, play areas, grass lawns, and associated improvements.
The building site is relatively level having been graded, grassed, and improved with the existing outdoor court. Ground elevation across the lawn and court is roughly elevation 214.5 feet above sea level. The site slopes from a high of 215 feet on the north to 214 feet on the south.

4. Soils

The Soil Conservation Service (1973) soils map for the area the School campus is underlain by two soil types: Hilo Silty Clay Loam, 0 to 10 percent slopes (HoC) and Rough Broken Land (RB). The building site is entirely within an area of HoC soils a well-drained loam formed in a series of volcanic ash. The soil is rapidly permeable, runoff is slow, and the erosion hazard is slight.

The level building site suggests the HoC soil horizon was disturbed by grubbing and grading to construct the outdoor play court and associated improvements. The grass lawn suggests that imported fill and topsoil were probably deposited further blurring the separation of surface and subsurface soil layers.

5. Hydrology

a. Surface Water

There are no surface water features on the premises.

6. Flood Hazards

The Flood Insurance Rate Map ("FIRM") places the School and adjoining communities in a ‘Non-Special Flood Hazard Area’ or an area in a low to moderate risk flood zone. Within the general delineation above, the School and surrounding communities are designated Zone X, which is defined as areas determined to be outside the 0.2% annual chance floodplain" (the 500 year flood). A Flood Hazard Map is shown as Figure 4.

7. Botanical Resources

The site of the existing court is sparsely vegetated. Shower trees are planted in a row along Old Government Main Road and the court is surrounded by a well-maintained lawn of Hilo grass (Paspalum conjugatum).

8. Biological Resources

Common birds such as mynah, barred dove, sparrow, and cattle egret were observed flying overhead, perched in trees, or browsing adjoining areas.

9. Archaeological Resources

Cultural Surveys Hawaii [(2014)] (2021) conducted a Literature Review and Field Inspection of the School and the site of the proposed play court. The field inspection confirmed "the ground surface throughout the project area has been completely altered by school development, and more specifically the construction of the existing playcourt. No
Effective DFIRM

- Zone XS (X shaded)
- Zone A
- Zone AE
- Zone AEF
- Zone AH
- Zone AO
- Zone D
- Zone VE
- Zone X
- Zone X Protected by Levee

Source: State of Hawaii, Dept. of Land & Natural Resources, Flood Hazard Assessment Tool Website.

Figure 4
Flood Hazard Assessment Report Map
Prince Jonah Kūhiō Kalaniana'ole Elementary & Intermediate School Covered Play Court

Gerald Park
Urban Planner
July 2021

Patha'a'iloa and Kalapoko, District of South Hilo, County of Hawai'i

Department of Education, State of Hawai'i
archaeological features were observed on the ground surface within the project area” (Cultural Surveys Hawai‘i, 2021).

The School is a listed feature on the Hawai‘i Register of Historic Places (Site No. 50-10-16-07522). It was placed on the Register in May 2002 as one several public schools on the Island of Hawai‘i to be so listed.

C. Land Use Controls

The State Land Use Commission under the authority of Chapter 205, Hawai‘i Revised Statutes classifies all land in the State of Hawai‘i as Agricultural, Conservation, Rural, and Urban. The Land Use Commission establishes use regulations for land in the Agricultural and Rural Districts and the counties are responsible for their administration. Use of Conservation District land is regulated by the State Board of Land and Natural Resources. Land uses in the Urban District are administered by the respective county government. The zoning powers of the respective counties also govern uses in other than the Conservation District.

- Developed areas surrounding and including the school are classified Urban on the state land use map for the area.

The use of Urban designated land is under the authority of the County of Hawai‘i and its applicable plans, ordinances, and regulations. Land use policies and controls for Hawaii County are vertically aligned or tiered for managing growth and land uses beginning with the County of Hawaii General Plan (“General Plan”). The General Plan is a broad policy document articulating island-wide goals, objectives, and policies for thirteen functional elements including but limited to the Economy and Population, Environmental Quality, Housing, Public Facilities, and Land Use. Each element is examined for the nine judicial districts comprising the County. The sum total of this comprehensive evaluation addresses conditions and courses of action needed to promote the betterment of the nine districts and all residents of the County.

For the District of South Hilo, the course of action for Education applicable to the proposed project is:

- Encourage continual improvements to existing education facilities.

The General Plan also includes a General Plan Development Pattern Map depicting desired development pattern for and within each respective district. The Land Use Pattern Allocation Guide Map(s) (LUPAG) for Papaikou (based on the General Plan) is the same as that shown on the Community Development Plan.

Community Development Plans comprise the second tier. The Hāmākua Community Development Plan (2018) supports the LUPAG map designation for the Scholl site which is:

- Low Density Urban

Hand in hand with the above land use designation, the HCDP includes policy statements and actions (Kokua actions) for improving the overall planning area communities. A community objective for educational facilities is worded thusly:
Figure 5
Community Development Plan
Prince Jonah Kūhiō Kalanianaʻole Elementary & Intermediate School Covered Play Court

Source: Hāmākua Community Development Plan, August 2018, Ordinance No. 2018-78

Paihaʻaloa and Kaʻapoko, District of South Hilo, County of Hawaiʻi

18
• 5.12.1 Community Objective: Develop and improve critical community infrastructure including utilities, healthcare, emergency services, affordable housing, educational opportunities and recreational facilities to keep our ‘ohana safe, strong, and healthy.

• Kokua Action 59: Continually improve existing educational facilities.

Zoning, which is the County’s primary land use control, is the third tier of the County’s land use management system. All land in the County is zoned except for federal lands. Zoning also controls land use and density and both are indicated by the zoning designation. For example, land zoned RS-15 means residential use with a minimum lot area of 15,000 square feet or AG-5a which is an agricultural zone with a minimum of 5 acres.

• The property is zoned for residential use (RS-7.5) (See Figure 6). Public uses and structures are permitted in the zoning district pursuant to Hawaii County Code Chapter 25, Zoning Code Permissible Uses (December, 2002).

D. Public Facilities and Services

• Domestic water is provided by an on-site water distribution system. Three-inch (3") waterlines are located on the southern end of the existing playcourt. The Department of Water Supply requires that the applicant submit a detailed estimated maximum daily water use calculation for review and approval. Based on the water usage calculation the Department will determine if the existing water meter size is adequate (Department of Water Supply comment).

Electrical and communication services are provided from overhead systems on the adjoining streets. Electrical distribution lines from the streets into the school grounds are placed underground.

Police and fire facilities are located in Laupōhoehoe and a volunteer fire station in Pepe‘ekeo.
PAPAIKOU-ONOMEA ZONE MAP
SECTION 25-8-34
(FORMALLY SECTION 7.30)

PORTION OF ORDINANCE NO. 190
AMENDING THE COMPREHENSIVE ZONING ORDINANCE NO. 63, REVISED ORDINANCES OF THE COUNTY OF HAWAII, 1967, BY ADOPTING THIS PAPAIKOU-ONOMEA ZONE MAP, SOUTH Hilo, HAWAII.

DATE OF PUBLIC HEARING: 7-26-68
DATE ADOPTED BY PLANNING COMMISSION: 12-29-68
DATE ADOPTED BY BOARD OF SUPERVISORS: 1-2-69

PREPARED BY:
PLANNING COMMISSION
COUNTY OF HAWAII

TAX MAP KEY: ZONE 2

Papaikou-Onomea zone map, marked thereupon as section 7.30.
(1996, Ord. No. 96-186, sec. 2; ratified April 8, 1999.)
The scope of the project was discussed with the consulting architect and design team. State and County agencies were contacted for information relative to their areas of expertise. Field investigation reports prepared by others were reviewed for information of the building site and the school campus. The sum total of the consultations and field investigations helped to identify existing conditions and features that could affect or be affected by the project. These conditions include:

- The building site is an existing uncovered outdoor basketball court;
- The court is surrounded by a grass lawn;
- There are no structures on the building site;
- Rare, threatened, or endangered flora or fauna were not observed on or near the building site;
- There are no archaeological resources adjoining the outdoor court;
- The School is a registered site on the Hawai'i Register of Historic Places;
- The School is not located in a flood hazard area;
- There are no streams, ponds, or wetlands on the school property.

[Note: This author neither had in person consults with government agencies nor visited the School because of Covid-19 flight and quarantine restrictions.]

A. Short-term Impacts

Construction will temporarily affect ambient air quality. Site work activities will raise fugitive dust that can settle in adjoining areas. Site work will be limited to the building site and the limited area to be disturbed should aid in mitigating dust generation and erosion. The general contractor will employ dust control measures to prevent work site and construction equipment and activities from becoming significant dust generators. Control measures shall comply with Chapter 60.1, Air Pollution Control, Title 11, State Department of Health (and revisions thereto).

Most construction equipment and vehicles are diesel powered and emit exhaust emissions typically high in nitrogen dioxide and low in carbon monoxide. The Federal and State nitrogen dioxide standard ---100mg/m³ per annum---which is an annual standard, is not likely to be exceeded during construction. Carbon dioxide emissions should be less than that generated by automobile traffic on adjoining streets. Fumes from diesel equipment may be detected but should be dispersed by the prevailing winds.

Like fugitive dust, construction noise cannot be avoided. Exposure to noise will vary by construction phase, the duration of each phase, and the type of equipment used during the different phases. Maximum sound levels in the range of 82-96 db(A) measured at 50 feet from the source would be generated by heavy machinery during site work. After site work is completed, reductions in sound levels, frequency, and duration can be expected.

Residential uses and schools are considered noise sensitive areas. The location of the covered play well distant from residential uses and school classrooms will aid in attenuating
construction noise. Work will be scheduled typically between the hours of 7:00 am and 3:30 pm Mondays through Fridays.

Community Noise Control regulations (State Department of Health, Title 11, Chapter 46 Noise Control) establish maximum permissible sound levels for construction activities occurring within "acoustical" zoning districts. Based on the residential zoning for the property, the project is classified as a Class A zoning district for noise control purposes. The maximum permissible daytime (7 a.m. to 10 p.m.) sound level in the district is 55 dBA during daytime and 45 dBA during nighttime for stationary noise sources and equipment related to construction (§11-46-4). Any noise source that emits noise levels in excess of the maximum permissible sound levels cannot be operated without first obtaining a noise permit from the State Department of Health. Although the permit does not attenuate noise per se it regulates the hours during which excessive noise is allowed. The contractor will be responsible for obtaining and complying with conditions attached to the permit.

Although limited in area, site work will expose soil thus creating opportunities for erosion (fugitive dust and suspended sediment in construction related runoff). Within the project limits the area to be grubbed and graded is estimated at 9,500 square feet. Trenching and stockpiling excavated or imported material will be performed in accordance with Chapter 10 Erosion and Sediment Control of the Hawaii County Code (Department of Public Works comment).

Best Management Practices (BMPS) for erosion and drainage control during construction will be incorporated into grading plans. BMPS will include erecting silt fences around the project limits, grassing exposed areas after grading work is completed, placing absorbent filter socks around drain inlets to minimize sediment discharge into the drainage system, and constructing stabilized construction access pads at the entrances to the building site. The contractor may implement other BMPS based on field conditions and their experience in working with similar work sites. The Department of Public Works also commented that "All development generated runoff shall be disposed of on-site and shall not be directed toward adjacent properties. A drainage study shall be prepared by a licensed civil engineer and the recommended drainage shall be constructed meeting the approval of the Department of Public Works”.

Site work is less than one acre thus a NPDES General Permit Authorizing Discharges of Storm Water Associated with Construction Activity will not be required from the State Department of Health.

Areas within the project limits disturbed by construction will be restored to pre-construction conditions or better.

Vehicles carrying workers and material will contribute to traffic on streets leading to the School. Material deliveries will be scheduled during non-peak traffic hours to minimize impact on local and school-related traffic.

A field office and base yard will be set up near the building site at a location to be determined. Material will be unloaded near the building site and/or stockpiled in the base yard. Construction equipment will be stored in the base yard and the yard secured after working hours.
According to Cultural Surveys Hawaiʻi (2021), “[T]he project area is evaluated as having no surface historic properties and as having a very low probability of subsurface historic properties. No further archaeological work is recommended.

Should site work activities encounter human remains or other significant subsurface deposits, all work in the immediate area will stop and the authorities promptly notified of the finds.

B. Long-term Impacts

Anticipated long-term impacts resulting from the project include but are not limited to:

- Provide a covered, all-weather structure for year ‘round recreational use and school activities.

- Shield students from the rain and the sun and heat on “hot” days thus providing for their health and safety.

- “Play court” noise should not be significantly “louder” than noise now emanating from students playing on the existing court. Noise will not be constant during the school day but occur when the play court is used for recess, P.E. classes, and school functions.

- Earthen swales will be constructed on the east and west sides of the play court to collect and convey surface and roof runoff into drywells for infiltration into the ground.

- Increases in energy costs can be mitigated as natural lighting and energy efficient light fixtures/luminaries are designed for the structure and its electrical system.

- The structure will present a new object to be seen on campus. At a height of 30'-6" it would rise slightly above the adjoining one-story building (Building E) and about the same height as the two-story Building I.

- The proposed structure has an approximate height of 30'-6" and does not exceed the building height for the zoning district.

- Over time, the structure will become part of the campus fabric and blend with the existing school buildings.

- The proposed use will not affect County of Hawaii land use controls for the property. County zoning regulations allow public uses and structures as permitted uses in the residential zoning district. Elementary schools are defined as “public uses” and permitted in the zoning district. The covered play court is an accessory structure to the principal use.

- Fire flow for the covered play court will be provided from an existing fire hydrant near Building A. Fire flow and pressure will be confirmed and brought into compliance with the Fire Code as required (Response to Fire Department comment). The structure will be equipped with a fire alarm system.
- Regular maintenance and periodic repairs will maintain the useful life of the structure. Repair, renovation, and replacement costs will be funded by the Department of Education.
A. No Action

A no action alternative would maintain the status quo of the building site thus precluding the occurrence of all environmental impacts, short and long-term, beneficial and adverse disclosed in this Assessment. Resources committed to planning and design of the facility will be foregone and the purpose of the project not achieved.

B. Alternative Sites

Two sites were proposed for the covered play court and two locations were proposed for each site (4 options total).

Two locations were presented for Site 1 and the option described in this assessment is the preferred option. The other site 1 option had the long side of the building oriented parallel to the parking stalls south of Building E. Development of the proposed facility at this location but in a different configuration would not result in environmental impacts substantially different from what is disclosed in this environmental assessment.

Two locations were presented for site 2 where both locations were to the south of Building I. Following discussion of the four options, Department of Education staff and School Administrators decided that a location at Site 1 was the preferred option.
Permits required for the project and responsible authorities are identified below. Additional permits and approvals may be required depending on final construction plans.

**State of Hawai‘i**

Department of Health

Variance from Pollution Controls (Noise Permit)

Department of Land and Natural Resources, Historic Sites Division

Chapter 6E Historic Review

**County of Hawai‘i**

Department of Water Supply

Planning Department

Plan Approval

Department of Public Works

Building, Electrical, and Plumbing Permit
Grubbing, Grading, and Stockpiling Permit
The Draft Environmental Assessment for the Prince Jonah Kūhiō Kalanianaʻole Elementary & Intermediate School Covered Play Court was published in the Office of Environmental Quality Control Environmental Notice of October 23, 2021. Publication initiated a 30-day public review period ending on November 22, 2021. The Draft Environmental Assessment was mailed to the agencies and organizations identified below requesting comments on the Draft Environmental Assessment. An asterisk * identifies agencies and organizations that submitted written comments during the review period. All comment letters and responses are found in Exhibit B.

State of Hawai‘i

Department of Land and Natural Resources
   Historic Preservation Division
   *Department of Health, Clean Air Branch

County of Hawai‘i

*Department of Water Supply
Department of Environmental Management
*Department of Planning
*Department of Public Works
*Police Department
*Fire Department

Others

Hawai‘i Electric Light Company
Honoka‘a Public Library (Placement)
Laupāhoehoe Public Library (Placement)
DETERMINATION OF SIGNIFICANCE

Hawai‘i Administrative Rules, Title 11, Department of Health, Chapter 200.1 (Environmental Impact Statement Rules) establishes criteria for determining whether an action may have significant effects on the environment (§11-200.1-13). The relationship of the proposed project to these criteria is discussed below.

1) Irrevocably commit a natural, cultural, or historic resource;

_Cultural Surveys Hawaii (2020) indicated the project area “as having no surface historic properties and as having a very low probability of subsurface historic properties.”_

_They concluded “the prospect for any traditional or on-going Native Hawaiian cultural practices in this project area appears very low.”_

_In the event subsurface deposits are encountered during the course of development activities all work in the immediate area will stop and authorities notified of the finds._

2) Curtail the range of beneficial uses of the environment;

_The project does not change the use of the environment. The covered play court will be erected on the site of an existing uncovered play court and should be treated as a new play court with a roof._

3) Conflict with the State’s environmental policies or long-term environmental goals established by law;

_The project does not conflict with long-term environmental policies, goals, and guidelines of the State of Hawaii._

4) Have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community and State;

_The project will not substantially affect the economic or social welfare of the State._

5) Have a substantial adverse effect on public health;

_Public health will not be affected. Short-term environmental impacts in the form of fugitive dust, construction noise, and minor erosion can be expected during construction. These impacts can and will be mitigated by measures described in this Assessment and measures, such as BMPs for erosion control._

6) Involve adverse secondary impacts, such as population changes or effects on public facilities;

_Substantial secondary impacts on public facilities are not anticipated._
7) Involve a substantial degradation of environmental quality;

   The covered play court will not further degrade environmental quality. It is anticipated that the facility will provide recreational and educational opportunities for students and a place for school assemblies and functions.

8) Be individually limited but cumulatively have substantial adverse effect upon the environment or involves a commitment for larger actions;

   The project does not involve a commitment for larger actions

9) Have a substantial adverse effect on a rare, threatened or endangered species, or its habitat;

   Rare, threatened, or endangered flora and fauna are not present on the building site

10) Have a substantial adverse effect on air or water quality or ambient noise levels;

    Ambient air quality will be affected by fugitive dust and combustion emissions during construction but can be controlled by measures stipulated in this Assessment. Construction noise will be pronounced during site preparation work but should diminish once the structural improvements are completed. All construction activities will comply with air quality and noise regulations of the State Department of Health.

    Construction will occur during the course of the school year. Site work is the first major activity and grubbing, grading, and excavation will generate noise that will be audible in nearby classrooms. Dust control measures should minimize the dispersion of fugitive dust escaping the project limits. The movement of workers and vehicles within the project limits also will contribute general noise. Dust and noise impacts cannot be avoided and the contractor will develop a time / work schedule in consultation with school administrators to minimize interference when school is in session.

11) Have a substantial adverse effect on or be likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, sea level rise exposure area, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;

    Prince Jonah Kūhiō Kalaniana'ole Elementary & Intermediate School is not located in environmentally sensitive areas listed in the above criterion.

12) Have a substantial adverse effect on scenic vistas and view planes, day or night, identified in county or state plans or studies, or,

    County and state plans do not identify significant scenic vistas and/ or panoramic views in the vicinity of the school.

13) Require substantial energy consumption or emit substantial greenhouse gases.

    Substantial energy consumption is not anticipated.
REFERENCES

County of Hawaii Planning Department. February 2005. County of Hawaii General Plan. Ordinance No. 05-25 (As Amended).


Division of Engineering, State Department of Land and Natural Resources. September 2017. Flood Hazard Assessment Report. Community Panel No. 1551660700F.

Governor’s Executive Order No. 2482. Setting Aside Land for Public Purposes.

Hāmākua Community Development Plan. August 2018. Ordinance No. 2018-78


EXHIBIT A


Note: The Archaeological Literature Review and Field Inspection Report is not reproduced for this environmental assessment but available by request. Please contact Gerald Park at gpark@gpup.biz for an electronic file.
EXHIBIT B

Draft Environmental Assessment Comments and Responses
October 26, 2021

Mr. Gerald Park
Urban Planner
95-595 Kaname’e St. #324
Mililani, HI 96789

Dear Mr. Park:

SUBJECT: PRINCE JONAH KUHIO KALANIANA‘OLE ELEMENTARY AND INTERMEDIATE SCHOOL COVERED PLAY COURT PAHAILOA AND KA‘APOKO, DISTRICT OF SOUTH HILO, COUNTY OF HAWAI‘I

Staff, upon reviewing the provided documents, does not anticipate any significant impact to traffic and/or public safety concerns.

Thank you for allowing us the opportunity to comment.

If you have any questions, please contact Captain Sandor Finkey of the Hilo Patrol Division at 961-2214 or via e-mail at sandor.finkey@hawaiicounty.gov.

Sincerely,

JAMES B TO CONNOR
ASSISTANT POLICE CHIEF
AREA I OPERATIONS

"Hawai‘i County is an Equal Opportunity Provider and Employer"
Hi Gerald,

The Department of Public Works (DPW), Engineering Division has reviewed the Draft EA for the Prince Jonah Kuhio Kalanianaole Elementary and Intermediate School Covered Play Courts located at TMK: (3) 2-7-022:002; 003; & (3) 2-7-025:004. Attached is a copy of DPW-ENG’s comments. A hardcopy will not be provided.

Should you have any questions, please let us know.

Thanks,
Bryce

Bryce Harada
County of Hawaii, Department of Public Works, Engineering Division
101 Pauahi Street, Suite 7
Hilo, HI 96720
Tel. (808) 961-8042
Email: bryce.harada@hawaiicounty.gov

The County of Hawaii is launching its new Electronic Processing & Information Center (EPIC) permit system on July 26, 2021. Only electronic applications will be accepted after that date. For more information go to https://www.dpw.hawaiicounty.gov/divisions/building/plans-permits-and-inspections-system.
October 29, 2021

Gerald Park, Urban Planner
95-595 Kaname‘e St., #324
Mililani, HI 96789
(via email to gpark@gpup.biz)

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED PRINCE JONAH KUHIO KALANIANAOLE ELEMENTARY AND INTERMEDIATE SCHOOL COVERED PLAY COURT PAHAIOA & KA’APOKO, SOUTH HILO, ISLAND OF HAWAII, HAWAII TMK: (3) 2-7-022:002; 003; & (3) 2-7-025:004

We have reviewed the request for early consultation for the draft Environmental Assessment dated October 20, 2021, and have the following comments:

1. All development generated runoff shall be disposed of on-site and shall not be directed toward adjacent properties. A drainage study shall be prepared by a licensed civil engineer and the recommended drainage system shall be constructed meeting the approval of the Department of Public Works.

2. All earthwork and grading activity shall conform to Chapter 10, Erosion and Sedimentary Control, of the Hawaii County Code.

3. The subject parcel is in an area designated as Flood Zone X on the Flood Insurance Rate Map (FIRM) by the Federal Emergency Management Agency (FEMA). Zone X is an area determined to be outside the 500-year floodplain.

Should there be any questions concerning this matter, please contact Bryce Harada of our Engineering Division at (808) 961-8042.

ALAN K. THOMPSON, Division Chief
Engineering Division

BH

c: Ms. Jolene Velasco, DOE Project Coordinator (jolene.velasco@k12.hi.us)
February 7, 2022

Steven Ikaika Rodenhurst, Director  
Department of Public Works  
County of Hawai‘i  
101 Pauahi Street, Suite 7  
Hilo, HI 96720

Dear Director Rodenhurst:

Subject: Prince Jonah Kūhiō Kalaniana‘ole Elementary and Intermediate  
School Covered Play Court  
Tax Map Key [3] 2-7-002: 002, 003 and 2-7-025: 004  
Pahailoa and Ka‘apoko, South Hilo, County of Hawai‘i

Thank you for reviewing and providing comments on the Draft Environmental Assessment for the subject project. Our replies are sequenced in the order the comments were presented.

1. A licensed civil engineer will prepare a drainage report for submittal to the Department of Public Works for review and approval. The proposed drainage design plan is to retain the increase in runoff on site.

2. Earthwork activities will conform to Chapter 10, Erosion and Sediment Control of the Hawai‘i County Code.

3. Thank you for confirming that the school is in an area designated Flood Zone X on the Flood Insurance Rate Map (FIRM) for the area.

Should you have questions and require more information, please contact me at (808) 625-9626 or email at gpark@gpup.biz or Ms. Jolene Velasco of the Department of Education at (808) 784-5129 or email at jolene.velasco@k12.hi.us.

Sincerely,

GERALD PARK URBAN PLANNER

Gerald Park, Principal

c: J. Velasco, DOE-FDB
November 3, 2021

Mr. Gerald Park, Urban Planner
95-595 Kaname'e St., #324
Mililani, HI 96789

Dear Mr. Park,

SUBJECT: Prince Jonah Kūhiō Kalanianaʻole Elementary and Intermediate School Covered Play Court, Pahailoa and Kaʻapōko, District of South Hilo, County of Hawaiʻi

In regards to the above-referenced subject, the following shall be in accordance:

Fire Alarm shall comply with Chapter 13 of the Hawaiʻi State Fire Code and its reference to NFPA 72.

NFPA 1, UNIFORM FIRE CODE, 2006 EDITION
Note: Hawaiʻi State Fire Code, National Fire Protection Association 2006 version, with County of Hawaiʻi amendments. County amendments are identified with a preceding “C~” of the reference code.

Chapter 18 Fire Department Access and Water Supply

18.1 General. Fire department access and water supplies shall comply with this chapter.

For occupancies of an especially hazardous nature, or where special hazards exist in addition to the normal hazard of the occupancy, or where access for fire apparatus is unduly difficult, or areas where there is an inadequate fire flow, or inadequate fire hydrant spacing, and the AHJ may require additional safeguards including, but not limited to, additional fire appliance units, more than one type of appliance, or special systems suitable for the protection of the hazard involved.

18.1.1 Plans.

18.1.1.1 Fire Apparatus Access. Plans for fire apparatus access roads shall be submitted to the fire department for review and approval prior to construction.
18.1.1.2 Fire Hydrant Systems. Plans and specifications for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction.

C~ 18.1.1.2.1 Fire Hydrant use and Restrictions. No unauthorized person shall use or operate any Fire hydrant unless such person first secures permission or a permit from the owner or representative of the department, or company that owns or governs that water supply or system. Exception: Fire Department personnel conducting firefighting operations, hydrant testing, and/or maintenance, and the flushing and acceptance of hydrants witnessed by Fire Prevention Bureau personnel.

18.2 Fire Department Access.

18.2.1 Fire department access and fire department access roads shall be provided and maintained in accordance with Section 18.2.

18.2.2* Access to Structures or Areas.

18.2.2.1 Access Box(es). The AHJ shall have the authority to require an access box(es) to be installed in an accessible location where access to or within a structure or area is difficult because of security.

18.2.2.2 Access to Gated Subdivisions or Developments. The AHJ shall have the authority to require fire department access be provided to gated subdivisions or developments through the use of an approved device or system.

18.2.2.3 Access Maintenance. The owner or occupant of a structure or area, with required fire department access as specified in 18.2.2.1 or 18.2.2.2, shall notify the AHJ when the access is modified in a manner that could prevent fire department access.

18.2.3 Fire Department Access Roads. (*may be referred as FDAR)

18.2.3.1 Required Access.

18.2.3.1.1 Approved fire department access roads shall be provided for every facility, building, or portion of a building hereafter constructed or relocated.

18.2.3.1.2 Fire Department access roads shall consist of roadways, fire lanes, parking lots lanes, or a combination thereof.

18.2.3.1.3* When not more than two one- and two-family dwellings or private garages, carports, sheds, agricultural buildings, and detached buildings or structures 400ft² (37 m²) or less are present, the requirements of 18.2.3.1 through 18.2.3.2.1 shall be permitted to be modified by the AHJ.
18.2.3.1.4 When fire department access roads cannot be installed due to location on property, topography, waterways, nonnegotiable grades, or other similar conditions, the AHJ shall be authorized to require additional fire protection features.

18.2.3.2 Access to Building.

18.2.3.2.1 A fire department access road shall extend to within 50 ft (15 m) of at least one exterior door that can be opened from the outside that provides access to the interior of the building. Exception: 1 and 2 single-family dwellings.

18.2.3.2.1.1 When buildings are protected throughout with an approved automatic sprinkler system that is installed in accordance with NFPA 13, NFPA 13D, or NFPA 13R, the distance in 18.2.3.2.1 shall be permitted to be increased to 300 feet.

18.2.3.2.2 Fire department access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150 ft (46 m) from fire department access roads as measured by an approved route around the exterior of the building or facility.

18.2.3.2.2.1 When buildings are protected throughout with an approved automatic sprinkler system that is installed in accordance with NFPA 13, NFPA 13D, or NFPA 13R, the distance in 18.2.3.2.2 shall be permitted to be increased to 450 ft (137 m).

18.2.3.3 Multiple Access Roads. More than one fire department access road shall be provided when it is determined by the AHJ that access by a single road could be impaired by vehicle congestion, condition of terrain, climatic conditions, or other factors that could limit access.

18.2.3.4 Specifications.

18.2.3.4.1 Dimensions.

C~ 18.2.3.4.1.1 FDAR shall have an unobstructed width of not less than 20 ft with an approved turn around area if the FDAR exceeds 150 feet. Exception: FDAR for one and two family dwellings shall have an unobstructed width of not less than 15 feet, with an area of not less than 20 feet wide within 150 feet of the structure being protected. An approved turn around area shall be provided if the FDAR exceeds 250 feet.

C~ 18.2.3.4.1.2 FDAR shall have an unobstructed vertical clearance of not less then 13 ft 6 in.

C~ 18.2.3.4.1.2.1 Vertical clearances may be increased or reduced by the AHJ, provided such increase or reduction does not impair access by the fire apparatus, and approved signs are installed and maintained indicating such approved changes.

18.2.3.4.1.2.2 Vertical clearances shall be increased when vertical clearances or widths are not adequate to accommodate fire apparatus.
18.2.3.4.2 Surface. Fire department access roads and bridges shall be designed and maintained to support the imposed loads (25 Tons) of the fire apparatus. Such FDAR and shall be comprised of an all-weather driving surface.

18.2.3.4.3 Turning Radius.

C~ 18.2.3.4.3.1 Fire department access roads shall have a minimum inside turning radius of 30 feet, and a minimum outside turning radius of 60 feet.

18.2.3.4.3.2 Turns in fire department access road shall maintain the minimum road width.

18.2.3.4.4 Dead Ends. Dead-end fire department access roads in excess of 150 ft (46 m) in length shall be provided with approved provisions for the fire apparatus to turn around.

18.2.3.4.5 Bridges.

18.2.3.4.5.1 When a bridge is required to be used as part of a fire department access road, it shall be constructed and maintained in accordance with county requirements.

18.2.3.4.5.2 The bridge shall be designed for a live load sufficient to carry the imposed loads of fire apparatus.

18.2.3.4.5.3 Vehicle load limits shall be posted at both entrances to bridges where required by the AHJ.

18.2.3.4.6 Grade.

C~ 18.2.3.4.6.1 The maximum gradient of a Fire department access road shall not exceed 12 percent for unpaved surfaces and 15 percent for paved surfaces. In areas of the FDAR where a Fire apparatus would connect to a Fire hydrant or Fire Department Connection, the maximum gradient of such area(s) shall not exceed 10 percent.

18.2.3.4.6.2* The angle of approach and departure for any means of fire department access road shall not exceed 1 ft drop in 20 ft (0.3 m drop in 6 m) or the design limitations of the fire apparatus of the fire department and shall be subject to approval by the AHJ.

18.2.3.4.6.3 Fire department access roads connecting to roadways shall be provided with curb cuts extending at least 2 ft (0.61 m) beyond each edge of the fire lane.

18.2.3.4.7 Traffic Calming Devices. The design and use of traffic calming devices shall be approved the AHJ.

18.2.3.5 Marking of Fire Apparatus Access Road.
18.2.3.5.1 Where required by the AHJ, approved signs or other approved notices shall be provided and maintained to identify fire department access roads or to prohibit the obstruction thereof of both.

18.2.3.5.2 A marked fire apparatus access road shall also be known as a fire lane.

18.2.4* Obstruction and Control of Fire Department Access Road.

18.2.4.1 General.

18.2.4.1.1 The required width of a fire department access road shall not be obstructed in any manner, including by the parking of vehicles.

18.2.4.1.2 Minimum required widths and clearances established under 18.2.3.4 shall be maintained at all times.

18.2.4.1.3* Facilities and structures shall be maintained in a manner that does not impair or impede accessibility for fire department operations.

18.2.4.1.4 Entrances to fire departments access roads that have been closed with gates and barriers in accordance with 18.2.4.2.1 shall not be obstructed by parked vehicles.

18.2.4.2 Closure of Accessways.

18.2.4.2.1 The AHJ shall be authorized to require the installation and maintenance of gates or other approved barricades across roads, trails, or other accessways not including public streets, alleys, or highways.

18.2.4.2.2 Where required, gates and barricades shall be secured in an approved manner.

18.2.4.2.3 Roads, trails, and other access ways that have been closed and obstructed in the manner prescribed by 18.2.4.2.1 shall not be trespassed upon or used unless authorized by the owner and the AHJ.

18.2.4.2.4 Public officers acting within their scope of duty shall be permitted to access restricted property identified in 18.2.4.2.1.

18.2.4.2.5 Locks, gates, doors, barricades, chains, enclosures, signs, tags, or seals that have been installed by the fire department or by its order or under its control shall not be removed, unlocked, destroyed, tampered with, or otherwise vandalized in any manner.

18.3 Water Supplies and Fire Hydrants

18.3.1* A water supply approved by the county, capable of supplying the required fire flow for fire protection shall be provided to all premises upon which facilities or buildings, or portions hereof, are hereafter constructed, or moved into or within the county. When any portion of the
facility or building is in excess of 150 feet (45 720 mm) from a water supply on a fire apparatus
access road, as measured by an approved route around the exterior of the facility or building, on-
site fire hydrants and mains capable of supplying the required fire flow shall be provided when
required by the AHJ. For on-site fire hydrant requirements see section 18.3.3.

EXCEPTIONS:
1. When facilities or buildings, or portions thereof, are completely protected with an
approved automatic fire sprinkler system the provisions of section 18.3.1 may be
modified by the AHJ.
2. When water supply requirements cannot be installed due to topography or other
conditions, the AHJ may require additional fire protection as specified in section 18.3.2
as amended in the code.
3. When there are not more than two dwellings, or two private garage, carports, sheds and
agricultural. Occupancies, the requirements of section 18.3.1 may be modified by AHJ.

18.3.2* Where no adequate or reliable water distribution system exists, approved reservoirs,
pressure tanks, elevated tanks, fire department tanker shuttles, or other approved systems capable
of providing the required fire flow shall be permitted.

18.3.3* The location, number and type of fire hydrants connected to a water supply capable of
delivering the required fire flow shall be provided on a fire apparatus access road on the site of
the premises or both, in accordance with the appropriate county water requirements.

18.3.4 Fire Hydrants and connections to other approved water supplies shall be accessible to the
fire department.

18.3.5 Private water supply systems shall be tested and maintained in accordance with NFPA 25
or county requirements as determined by the AHJ.

18.3.6 Where required by the AHJ, fire hydrants subject to vehicular damage shall be protected
unless located within a public right of way.

18.3.7 The AHJ shall be notified whenever any fire hydrant is placed out of service or returned
to service. Owners of private property required to have hydrants shall maintain hydrant records
of approval, testing, and maintenance, in accordance with the respective county water
requirements. Records shall be made available for review by the AHJ upon request.

C~ 18.3.8 Minimum water supply for buildings that do not meet the minimum County water
standards:

Buildings up to 2000 square feet, shall have a minimum of 3,000 gallons of water available for
Firefighting.

Buildings, 2001- 3000 square feet, shall have a minimum of 6,000 gallons of water available for
Firefighting.
Buildings, 3001-6000 square feet, shall have a minimum of 12,000 gallons of water available for firefighting.

Buildings, greater than 6000 square feet, shall meet the minimum County water and fire flow requirements.

Multiple story buildings shall multiply the square feet by the amount of stories when determining the minimum water supply.

Commercial buildings requiring a minimum fire flow of 2000gpm per the Department of Water standards shall double the minimum water supply reserved for firefighting.

Fire Department Connections (FDC) to alternative water supplies shall comply with 18.3.8 (1)-(6) of this code.

**NOTE:** In that water catchment systems are being used as a means of water supply for firefighting, such systems shall meet the following requirements:

1) In that a single water tank is used for both domestic and firefighting water, the water for domestic use shall not be capable of being drawn from the water reserved for firefighting;

2) Minimum pipe diameter sizes from the water supply to the Fire Department Connection (FDC) shall be as follows:
   a) 4'' for C900 PVC pipe;
   b) 4'' for C906 PE pipe;
   c) 3'' for ductile Iron;
   d) 3' for galvanized steel.

3) The Fire Department Connection (FDC) shall:
   a) be made of galvanized steel;
   b) have a gated valve with 2-1/2 inch, National Standard Thread male fitting and cap;
   c) be located between 8 ft and 16 ft from the Fire department access. The location shall be approved by the AHJ;
   d) not be located less than 24 inches, and no higher than 36 inches from finish grade, as measured from the center of the FDC orifice;
   e) be secure and capable of withstanding drafting operations. Engineered stamped plans may be required;
   f) not be located more than 150 feet of the most remote part, but not less than 20 feet, of the structure being protected;
   g) also comply with section 13.1.3 and 18.2.3.4.6.1 of this code.

4) Commercial buildings requiring a fire flow of 2000gpm shall be provided with a second FDC. Each FDC shall be independent of each other, with each FDC being capable of flowing 500gpm by engineered design standards. The second FDC shall be located in an area approved by the AHJ with the idea of multiple Fire apparatus’ conducting drafting operations at once, in mind.
5) Inspection and maintenance shall be in accordance to NFPA 25.

6) The owner or lessee of the property shall be responsible for maintaining the water level, quality, and appurtenances of the system.

EXCEPTIONS TO SECTION 18.3.8:

1) Agricultural buildings, storage sheds, and shade houses with no combustible or equipment storage.

2) Buildings less than 800 square feet in size that meets the minimum Fire Department Access Road requirements.

3) For one and two family dwellings, agricultural buildings, storage sheds, and detached garages 800 to 2000 square feet in size, and meets the minimum Fire Department Access Road requirements, the distance to the Fire Department Connection may be increased to 1000 feet.

4) For one and two family dwellings, agricultural buildings, and storage sheds greater than 2000 square feet, but less than 3000 square feet and meets the minimum Fire Department Access Road requirements, the distance to the Fire Department Connection may be increased to 500 feet.

5) For buildings with an approved automatic sprinkler system, the minimum water supply required may be modified.

If there are any questions regarding these requirements, please contact Battalion Chief Palani Kurashige at (808) 932-2912.

KAZUO S. K. L. TODD
Fire Chief

KT:lK
February 7, 2022

Kazuo Todd, Fire Chief
Hawai'i Fire Department
25 Aupuni Street, Suite 2501
Hilo, HI 96720

Dear Chief Todd:

Subject: Prince Jonah Kūhiō Kalaniana'ole Elementary and Intermediate School Covered Play Court
Tax Map Key [3] 2-7-002: 002, 003 and 2-7-025: 004
Pahailoa and Ka'apoko, South Hilo, County of Hawai'i

Thank you for reviewing and commenting on the Draft Environmental Assessment for the subject project. We offer the following response to the Fire Department comments.

The fire hydrant and fire lane will be in compliance with the Hawaii Fire Department requirements.

Actual fire flow and pressure to be confirmed and brought into compliance with the fire code as required.

Should you have questions and require more information, please contact me at (808) 625-9626 or email at gpark@gpup.biz or Ms. Jolene Velasco of the Department of Education at (808) 784-5129 or email at jolene.velasco@k12.hi.us.

Sincerely,

GERALD PARK URBAN PLANNER

Gerald Park, Principal

c: J. Velasco, DOE-FDB
November 19, 2021

Mr. Gerald Park
Gerald Park Urban Planner
95-595 Kaname’e Street, No. 324
Mililani, HI 96789

Dear Mr. Park:

Subject: Draft Environmental Assessment for Prince Jonah Kūhiō Kalaniana‘ole Elementary and Intermediate School Covered Play Court
Pahailoa and Ka‘apōko, South Hilo, County of Hawai‘i
Tax Map Key 2-7-022:002, 003 and 2-7-025:004

We have reviewed the subject Draft Environmental Assessment and have the following comments.

The Department requires that the applicant submit a detailed estimated maximum daily water usage calculation for the proposed covered play court improvements, prepared by a professional engineer, licensed in the State of Hawai‘i, for review and approval. The water usage calculations should include the total estimated daily water usage in gallons per day (GPD) and the estimated peak flow in gallons per minute (GPM).

Based on the water usage calculations provided, the Department will determine if the existing meter size is adequate.

Should there be any questions, please contact Mr. Ryan Quitoriano of our Water Resources and Planning Branch at (808) 961-8070, extension 256.

Sincerely yours,

[Signature]

Keith K. Okamoto, P.E.
Manager-Chief Engineer

RQ:dfg

copy – State of Hawai‘i, Department of Education

... Water, Our Most Precious Resource ... Ka Wai A Kāne ...

The Department of Water Supply is an Equal Opportunity provider and employer.
February 7, 2022

Keith Okamoto, Manager-Chief Engineer
Department of Water Supply
County of Hawai‘i
345 Kekuanaoa Street, Suite 20
Hilo, HI 96720

Dear Manager-Chief Engineer Okamoto:

Subject: Prince Jonah Kūhiō Kalaniana‘ole Elementary and Intermediate School Covered Play Court

Tax Map Key [3] 2-7-002: 002, 003 and 2-7-025: 004
Pahailoa and Ka‘apoko, South Hilo, County of Hawai‘i

Thank you for reviewing and providing comments on the Draft Environmental Assessment for the subject project.

A detailed estimated maximum daily water usage calculation will be prepared by a professional engineer licensed in the State of Hawai‘i. The calculations will be submitted to the Department of Water Supply for review and approval as requested.

Should you have questions and require more information, please contact me at (808) 625-9626 or email at gpark@gpup.biz or Ms. Jolene Velasco of the Department of Education at (808) 784-5129 or email at jolene.velasco@k12.hi.us.

Sincerely,

GERALD PARK URBAN PLANNER

Gerald Park, Principal

c: J. Velasco, DOE-FDB
If your proposed project:

**Requires an Air Pollution Control Permit**
You must obtain an air pollution control permit from the Clean Air Branch and comply with all applicable conditions and requirements. If you do not know if you need an air pollution control permit, please contact the Permitting Section of the Clean Air Branch.

**Includes construction or demolition activities that involve asbestos**
You must contact the Asbestos Abatement Office in the Indoor and Radiological Health Branch.

**Has the potential to generate fugitive dust**
You must control the generation of all airborne, visible fugitive dust. Note that construction activities that occur near to existing residences, business, public areas and major thoroughfares exacerbate potential dust concerns. It is recommended that a dust control management plan be developed which identifies and mitigates all activities that may generate airborne, visible fugitive dust. The plan, which does not require Department of Health approval, should help you recognize and minimize potential airborne, visible fugitive dust problems.

Construction activities must comply with the provisions of Hawaii Administrative Rules, §11-60.1-33 on Fugitive Dust. In addition, for cases involving mixed land use, we strongly recommend that buffer zones be established, wherever possible, in order to alleviate potential nuisance complaints.

You should provide reasonable measures to control airborne, visible fugitive dust from the road areas and during the various phases of construction. These measures include, but are not limited to, the following:

a) Planning the different phases of construction, focusing on minimizing the amount of airborne, visible fugitive dust-generating materials and activities, centralizing on-site vehicular traffic routes, and locating potential dust-generating equipment in areas of the least impact;

b) Providing an adequate water source at the site prior to start-up of construction activities;

c) Landscaping and providing rapid covering of bare areas, including slopes, starting from the initial grading phase;

d) Minimizing airborne, visible fugitive dust from shoulders and access roads;

e) Providing reasonable dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and

f) Controlling airborne, visible fugitive dust from debris being hauled away from the project site.

If you have questions about fugitive dust, please contact the Enforcement Section of the Clean Air Branch

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<tr>
<th>Clean Air Branch</th>
<th>Indoor Radiological Health Branch</th>
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<tbody>
<tr>
<td>(808) 586-4200</td>
<td>(808) 586-4700</td>
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<td><a href="mailto:cab@doh.hawaii.gov">cab@doh.hawaii.gov</a></td>
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April 1, 2019
DATE: November 23, 2021

TO: GERALD PARK
Gerald Park Urban Planner

FROM: LONG RANGE DIVISION
COH Planning Department

SUBJECT: Draft Environmental Assessment for Proposed Prince Jonah Kūhiō Kalaniana'ole Elementary and Intermediate School Covered Play Court
Applicant: Gerald Park
Tax Map Key(s): (3)2-7-022-003 and (3)2-7-025-004

Mahalo for the opportunity to comment on the Draft Environmental Assessment for the Proposed Prince Jonah Kūhiō Kalaniana'ole Elementary and Intermediate School Covered Play Court replacement.

We reviewed your environmental assessment alongside the 2005 Hawai‘i County General Plan and the Hāmākua Community Development Plan. We have no comments to offer at this time. Should you have any questions, or if you need further assistance, please feel free to contact Heather Bartlett of this office at Heather.Bartlett@hawaiicounty.gov or (808) 961-8137.

HB:km
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