



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAII 96804

OFFICE OF FACILITIES AND OPERATIONS

October 11, 2021

TO: Mr. Keith E. Kawaoka
Acting Director, Office of Environmental Quality Control
Department of Health

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

SUBJECT: **Chapter 343, Hawaii Revised Statutes, Draft Environmental Assessment
and Anticipated Finding of No Significant Impact
Kalaniana'ole Elementary & Intermediate School Covered Playcourt
Pahaloa and Kaapoko, Hilo, Hawaii
Job No.: Q11201-18
Tax Map Key: (3) 2-7-022: 002, 003 and (3) 2-7-025: 004**

The Hawaii State Department of Education hereby transmits the Draft Environmental Assessment and Anticipated Finding of No Significant Impact (DEA-AFONSI) for the Kalaniana'ole Elementary & Intermediate School Covered Playcourt project for publication in the next edition of the Environmental Notice.

A Portable Document Format (PDF) copy of the DEA-AFONSI in PDF format with the Office of Environmental Quality Control (OEQC) publication form will be uploaded to the OEQC website. A printed copy of the DEA-AFONSI will be mailed to the Hawaii Documents Center.

Should you have any questions, please contact Jolene Velasco, Project Coordinator of the Facilities Development Branch, Project Management Section, at (808) 784-5129 or via email at jolene.velasco@k12.hi.us.

ESI:jv

c: Facilities Development Branch

From: webmaster@hawaii.gov
To: [DBEDT OPSD Environmental Review Program](#)
Subject: New online submission for The Environmental Notice
Date: Thursday, October 14, 2021 2:37:57 PM

Action Name

Prince Jonah Kuhio Kalanianaʻole Elementary & Intermediate School Covered Play Court

Type of Document/Determination

Draft environmental assessment and anticipated finding of no significant impact (DEA-AFNSI)

HRS §343-5(a) Trigger(s)

- (1) Propose the use of state or county lands or the use of state or county funds

Judicial district

South Hilo, Hawaiʻi

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, DCAB Review, Historic Site Review (Chapter 6E HRS) Plan Approval, Building Electrical and Plumbing, Grubbing, Grading, and Stockpiling,

Proposing/determining agency

Department of Education

Agency contact name

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[Map It](#)

Was this submittal prepared by a consultant?

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95-595 Kanamee Street #324 Mililani, Hawaii 96789-1431 United States Map It
Action summary
<p>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.</p> <p>The approximately 10,200 square feet (117’-2” X 87’-0”) structure 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.</p> <p>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</p> <p>Construction costs are estimated at \$4.0 million and will be funded by the State of Hawai‘i.</p>
Reasons supporting determination
Reasons supporting the determination are in Section 7 of the Draft Environmental Assessment.
Attached documents (signed agency letter & EA/EIS)
<ul style="list-style-type: none"> • Kanoelani-Elem-School-Draft-EA.pdf • Letter-10-8-21-DEA-AFONSI-Kalanianaole-ES-IS-Covered-Playcourt-Q11201-18_signed.pdf
Action location map
<ul style="list-style-type: none"> • Kalanianaole-Elem-School-Figure-1-Vicinity-Map.zip
Authorized individual
Gerald Park
Authorization
<ul style="list-style-type: none"> • The above named authorized individual hereby certifies that he/she has the authority to make this submission.

DRAFT ENVIRONMENTAL ASSESSMENT

PRINCE JONAH KŪHIŌ KALANIANAʻOLE 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**

'Okakopa 2021

DRAFT ENVIRONMENTAL ASSESSMENT

PRINCE JONAH KŪHIŌ KALANIANAʻOLE ELEMENTARY AND INTERMEDIATE SCHOOL COVERED PLAY COURT

Pahailoa and Ka'apōko, 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
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Prepared by

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And

Design Partners, Inc.
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Honolulu, Hawai'i 96814

'Okakopa 2021

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

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Note: Available by request.

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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 Pahaloa 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-3The 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.

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.



Source: Google Maps 2012 Aerial

Figure 1
Vicinity Map
Prince Jonah Kūhiō Kalaniana'ole Elementary
& Intermediate School Covered Play Court

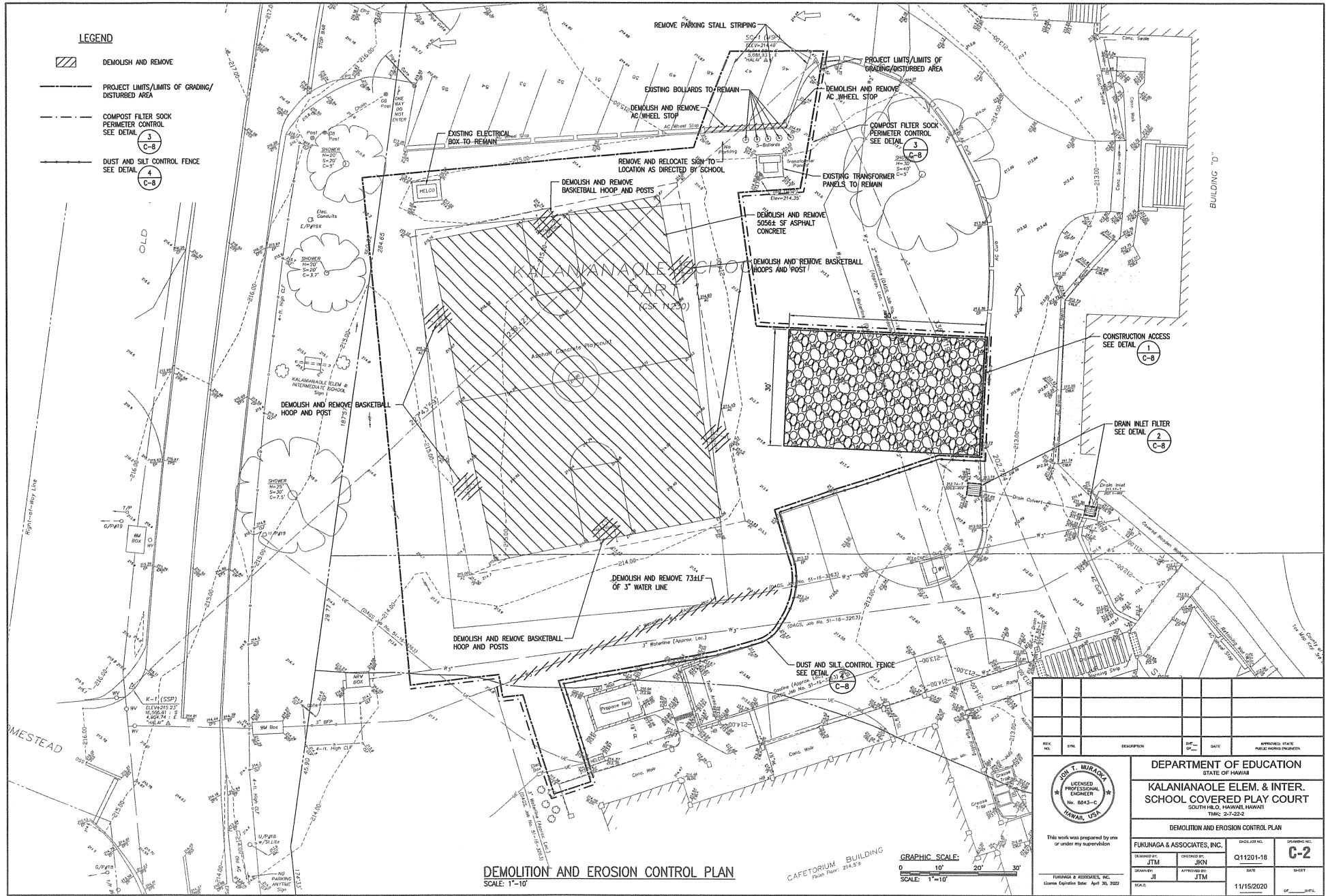


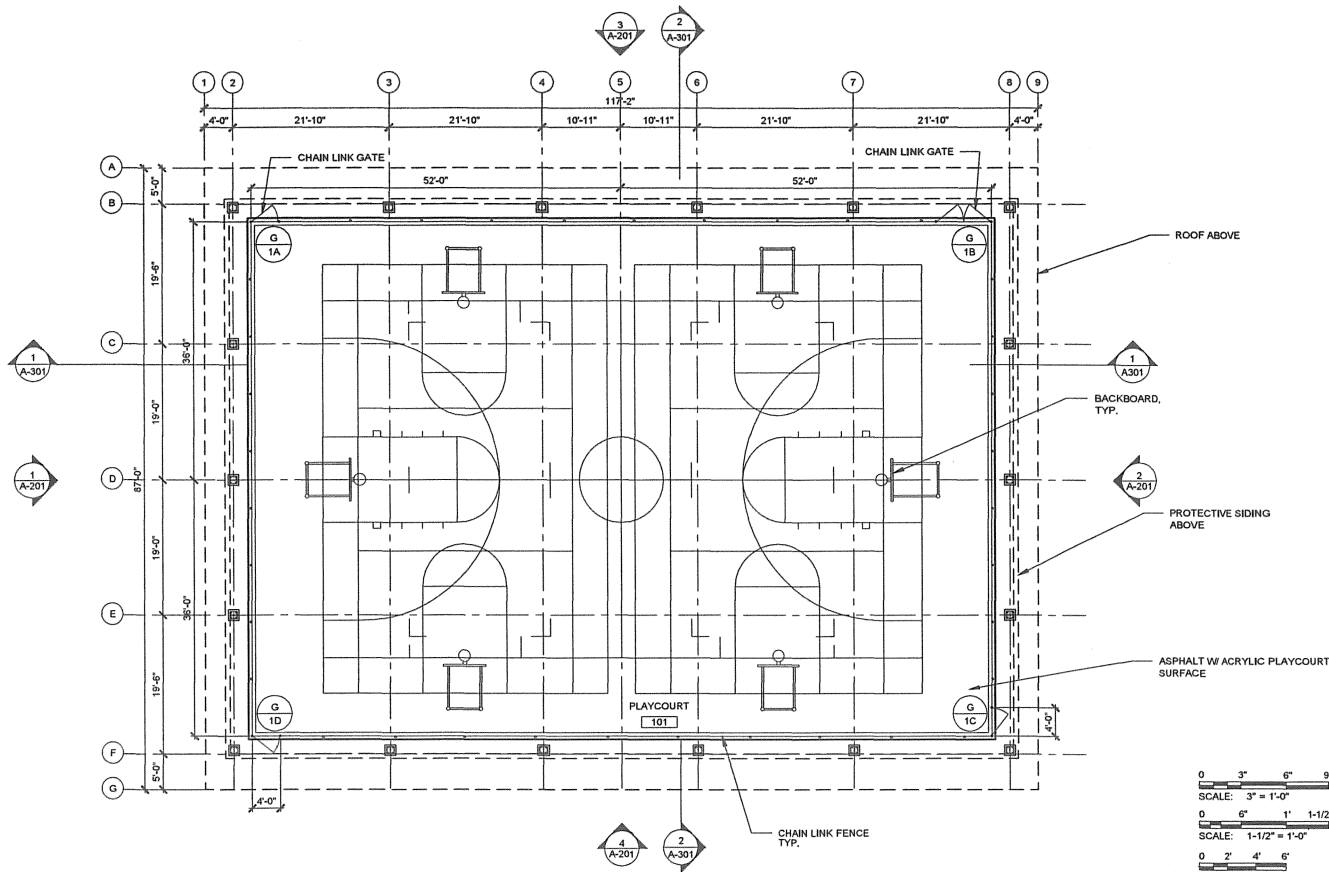
Papa'aloa and Ka'apoko, District of South Hilo, County of Hawaii



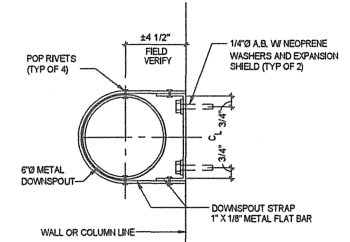
Source: Google Maps & Design Partners

Figure 3
Campus Map
Prince Jonah Kūhiō Kalaniana'ole Elementary
& Intermediate School Covered Play Court

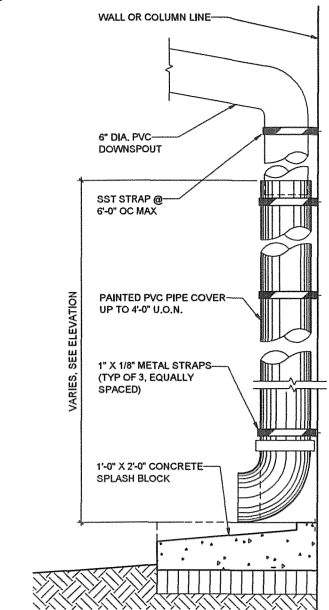




1 FLOOR PLAN
A-101 SCALE: 1/8" = 1'-0"



2 DOWNSPOUT PLAN VIEW
A-310 SCALE: 3" = 1'-0"



3 DOWNSPOUT DETAIL
A-310 SCALE: 1 1/2" = 1'-0"

GATE SCHEDULE (ADDITIVE ALTERNATE NO.1)

GATE NO.	ROOM NAME	SIZE (W X H)	TYPE (NOTE 2)	CONSTR. (NOTE 3)	FINISH (NOTE 4)	DOOR FRAME (NOTE 5)	HEAD	JAMB	THRESH.	HDWR. SET (NOTE 6)	REMARKS (NOTE 7)
1A	PLAYCOURT	4'-0" x 10'-0"	X1	CLG	X	X	CLF	-	-	-	1, 2
1B	PLAYCOURT	8'-0" x 9'-2"	X2	CLG	X	X	CLF	-	-	-	1, 3
1C	PLAYCOURT	4'-0" x 10'-0"	X1	CLG	X	X	CLF	-	-	-	1, 2
1D	PLAYCOURT	4'-0" x 10'-0"	X1	CLG	X	X	CLF	-	-	-	1, 2

GATE SCHEDULE NOTES

1. (L) SHOWN ON SCHEDULE INDICATES TYPICAL.
(-) INDICATES FEATURE NOT REQUIRED.
(X) INDICATES EXISTING TO REMAIN

2. GATE TYPES:
SEE GATE TYPE ELEVATIONS.

3. GATE CONSTRUCTION:
CLG = CHAINLINK GATE

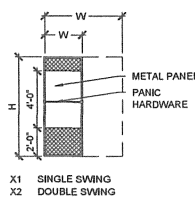
4. FACING & FINISH:
SP = STEEL, PAINTED
AA = ALUMINUM, HI-PERFORMANCE
FLOUROCARBON PAINT SYSTEM

5. FRAME CONSTRUCTION:
TYPICAL (L) = WOOD (WD)
CLF = CHAINLINK FENCE
SPL = SEE SPEC. FOR INFORMATION

6. HARDWARE GROUP SET
SEE SPECIFICATIONS- SECTION 08710

7. REMARKS:
1: PROVIDE SIGNAGE AS REQUIRED PER 2006 IBC
2: PANIC HARDWARE
3: HEADER WILL BE REQUIRED TO LATCH DEVICES

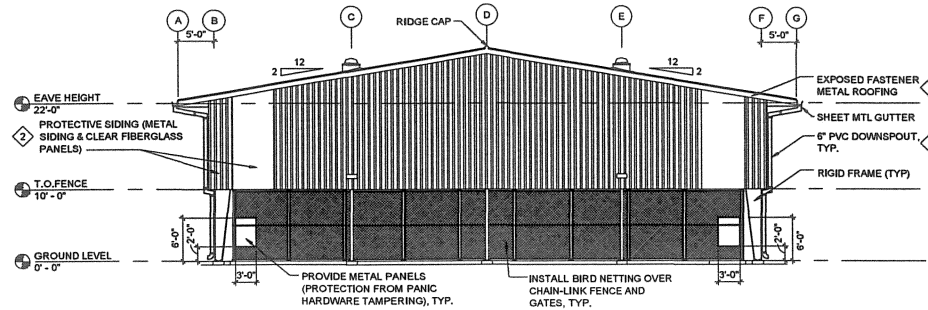
8. PANIC HARDWARE NOTES:
1. THE ACTUATING PORTION OF THE RELEASING
DEVICE SHALL EXTEND AT LEAST ONE-HALF OF
THE DOOR LEAF WIDTH.
2. THE MAXIMUM UNLATCHING FORCE SHALL NOT
EXCEED 15 POUNDS (67N).



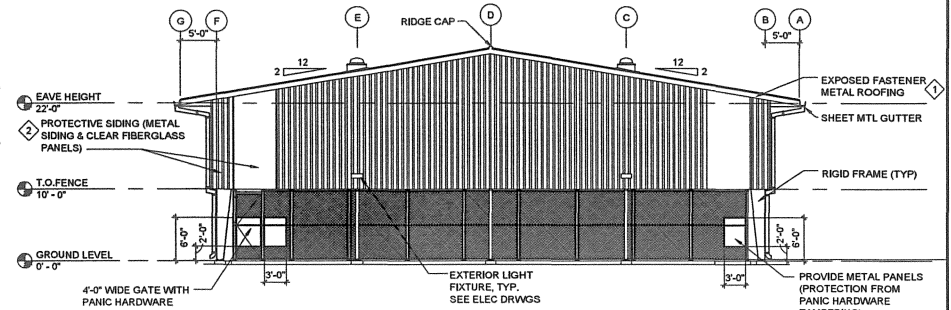
4 GATE TYPES
A-301 SCALE: 1/4" = 1'-0"

REV.	NO.	DATE	DESCRIPTION	BY	DATE	APPROVED BY	DATE
<p>DEPARTMENT OF EDUCATION STATE OF HAWAII KALANIANA'OLE ELEM. & INTER. SCHOOL COVERED PLAYCOURT SOUTH HILLS, MAUNALEI, HAWAII TMK: 2-7-22-2</p>							
<p>FLOOR PLAN, GATE SCHEDULE</p>							
<p>DESIGN PARTNERS, INC.</p>				<p>DATE: 05/20/20</p>		<p>PROJECT: A-101</p>	
<p>DRAWN BY: KE</p>				<p>CHECKED BY: JC</p>		<p>DATE: 05/20/20</p>	
<p>APPROVED BY: KE</p>				<p>DATE: 05/20/20</p>		<p>PROJECT: 4</p>	
<p>SCALE: AS SHOWN</p>				<p>DATE: MAY 2020</p>		<p>PROJECT: 4</p>	

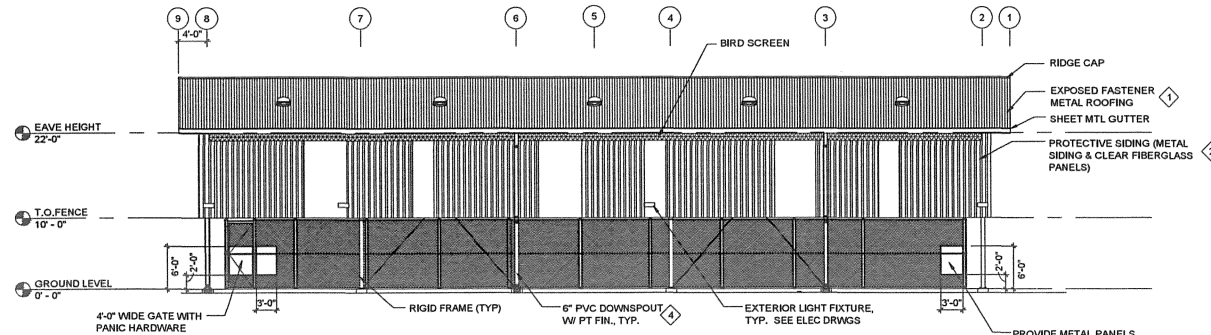
NOTE:
ALL EXPOSED STRUCTURAL MEMBERS INCLUDING RIGID FRAME, ORITS
AND PURLING SHALL BE PROVIDED WITH HIGH PERFORMANCE COATING



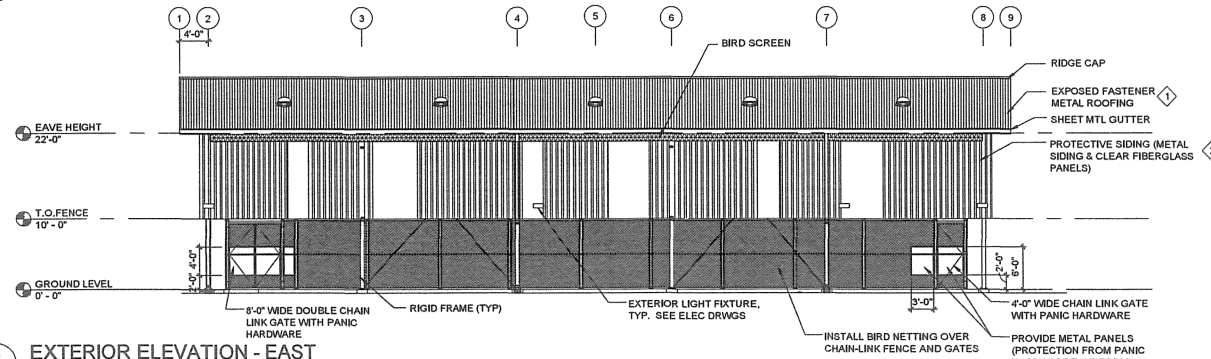
1 EXTERIOR ELEVATION - NORTH
A-201 SCALE: 1/8" = 1'-0"



2 EXTERIOR ELEVATION - SOUTH
A-201 SCALE: 1/8" = 1'-0"



3 EXTERIOR ELEVATION - WEST
A-201 SCALE: 1/8" = 1'-0"



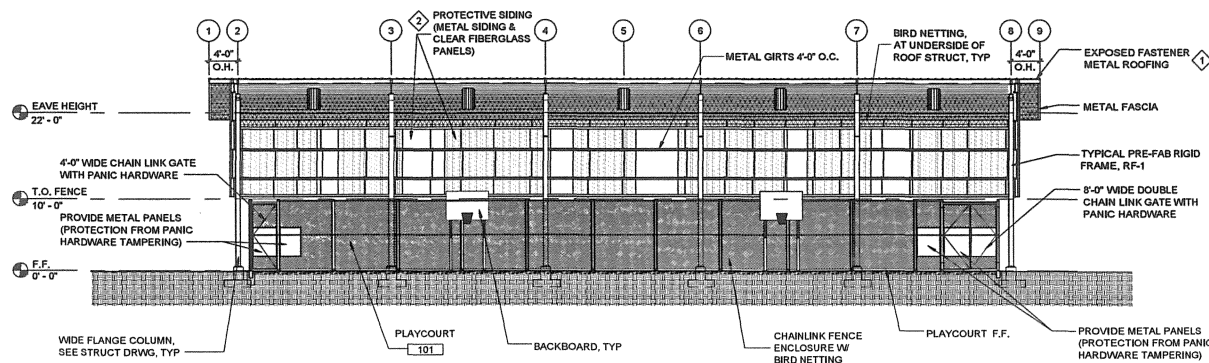
4 EXTERIOR ELEVATION - EAST
A-201 SCALE: 1/8" = 1'-0"

0 2 4 8 16'
SCALE: 1/8" = 1'-0"

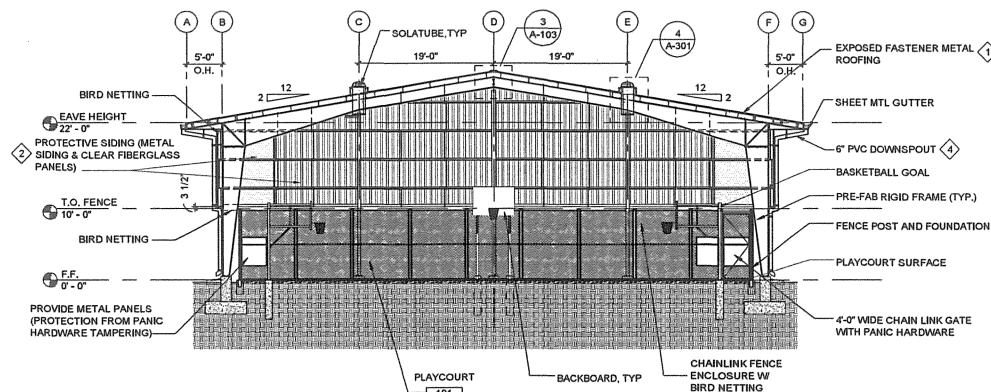
EXTERIOR FINISH SCHEDULE

SYMBOL	DESCRIPTION	PRODUCT / COLOR NAME / NUMBER	REMARKS
1	EXPOSED FASTENER METAL ROOFING - EXTERIOR SURFACE	TO BE SELECTED BY THE ARCHITECT	FACORY FINISH STANDARD COLOR
2	EXPOSED FASTENER METAL SIDING	TO BE SELECTED BY THE ARCHITECT	FACORY FINISH STANDARD COLOR, BOTH SIDES, FRONT AND BACK
3	HIGH PERFORMANCE PAINT	TO BE SELECTED BY THE ARCHITECT	ALL EXPOSED PRIMARY STEEL STRUCTURAL MEMBERS
4	GUTTERS AND DOWNSPOUTS	TO BE SELECTED BY THE ARCHITECT	

REV.	NO.	DATE	DESCRIPTION	BY	DATE	APPROVED (STATE PUBLIC WORKS ENGINEER)
<p>DEPARTMENT OF EDUCATION STATE OF HAWAII KALANIANA'OLE ELEM. & INTER. SCHOOL COVERED PLAYCOURT SOUTH HOLE, HAWAII, HAWAII TRAC 3-7-22-2</p> <p>EXTERIOR ELEVATIONS & EXTERIOR FINISH SCHEDULE</p> <p>DESIGN PARTNERS, INC. DESIGNED BY: KE DRAWN BY: JM CHECKED BY: JC APPROVED BY: KE DATE: Q11201-16 SCALE: AS SHOWN</p> <p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION</p> <p>DATE: MAY 2020 SHEET: 7 OF 7</p> <p>A-201</p>						

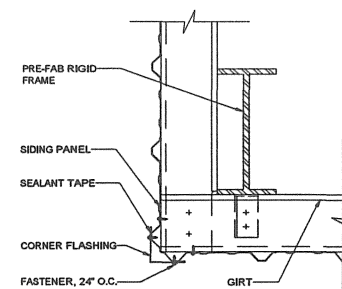


1 BUILDING SECTION
A-301 SCALE: 1/8" = 1'-0"

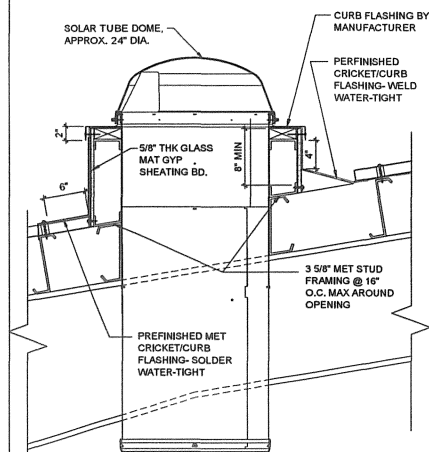


2 BUILDING SECTION
A-301 SCALE: 1/8" = 1'-0"

NOTE:
ALL EXPOSED STRUCTURAL MEMBERS INCLUDING RIGID FRAME, GRITS
AND PURLING SHALL BE PROVIDED WITH HIGH PERFORMANCE COATING



3 SIDING/FLASHING AT CORNER
A-301 SCALE: 1 1/2" = 1'-0"



4 SOLATUBE MOUNTING DETAILS

[illegible]

A. Background Information

¹ “Established in 1884, Prince Jonah Kūhiō Kalanianaʻole Elementary & Intermediate School boasts a long and proud history centered on the hard work and values that were prevalent in the plantation era of Hawaiʻi. A combination of the former Pāpaʻikou, Pepeʻekeo, Honomū, and Hakalau schools, our school was named to honor the statesman and Prince Jonah Kūhiō Kalanianaʻole 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 Honoliʻi, Paukaʻa, Papaikou, Pepeʻekeo, Honomū, and Hakalau”.

Existing structures are identified in Table 1.

Table 1. Structures at KEIS

Building	Use	Area (sf)	Floors	Year Built
A	Classroom	21,254	2	1921
B	Kindergarten	3,700	1	1926
D	Classroom	12,618	1	1945
E	Shop	3,770	1	1965
F	Restroom	704	1	1960
H	Classroom	14,748	2	1971
I	Cafeteria	5,968	1	1975
J	Band / Art	5,363	1	1980

Source: Department of Education, 2006, Design Partners, Inc. 2021.

The School is part of the Department of Education's Hawaiʻi 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, Haaheeo, Hilo Union, Kapiolani, Kaumana, and Keaukaha Elementary Schools. Hilo Intermediate, Kalanianaʻole, 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.

¹ KEIS 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

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

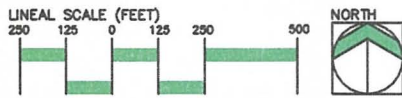
Common birds such as mynah, barred dove, sparrow, and cattle egret were observed flying overhead, perched in trees, or browsing adjoining areas.

9. Archaeological Resources

Cultural Surveys Hawaii (2014) 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



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



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:

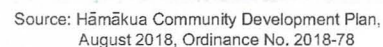
- Encourage continual improvements to existing education facilities.

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:



- 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.

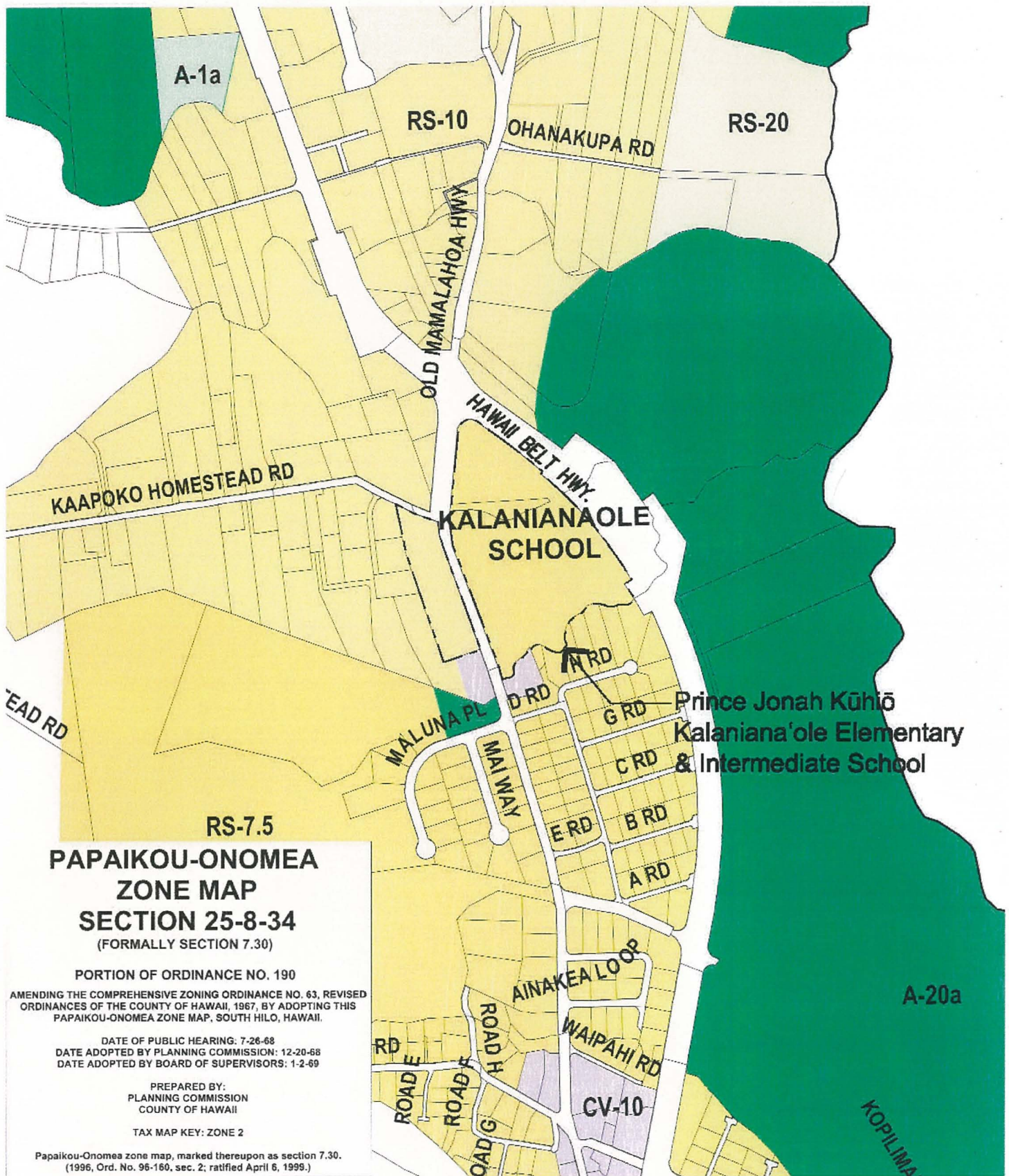
- The property is zoned for residential use (RS-7.5) (See Figure 6). Public uses and structures are permitted in the zoning district pursuant to Hawaii County Code Chapter 25, Zoning Code Permissible Uses (December, 2002).

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.

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.



Source: County of Hawaii, Department of Planning Website

Figure 6
 Zoning

Prince Jonah Kūhiō Kalaniana'ole Elementary
 & Intermediate School Covered Play Court



Paiha'a'aloa and Ka'apoko, District of South Hilo, County of Hawaii

3

SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS AND MEASURES TO MITIGATE ADVERSE EFFECTS

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

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.

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 Hawai'i (2021), “[T] the 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. 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

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AGENCIES AND ORGANIZATIONS TO BE CONSULTED

State of Hawai'i

Department of Land and Natural Resources
Historic Preservation Division

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)

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.

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EXHIBIT A

Draft Archaeological Literature Review and Field Inspection for the Prince Jonah Kūhiō Kalaniana'ole Elementary and Intermediate School Covered Playcourt Project, Paiha'aloa and Ka'āpoko Ahupua'a, South Hilo District, Hawai'i Island TMK: [3] 2-7-022: 002 por.

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.