

**STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
OFFICE OF CONSERVATION AND COASTAL LANDS  
HONOLULU, HAWAII**

*October 26, 2018*

**BOARD OF LAND AND  
NATURAL RESOURCES  
STATE OF HAWAII  
HONOLULU, HAWAII**

**REGARDING:** Conservation District Use Application (CDUA) OA-3818

**APPLICANT:** MDHE, LLC

**AGENT:** Group 70 International, Inc.

**LOCATION:** Kailua, Ko'olaupoko District, Island of Oahu

**TMKs:** (1) 4-2-004:001

**AREA OF PARCELS:** 36.89 acres

**AREA OF USE:** 7.6 acres

**SUBZONE:** General

**DESCRIPTION OF AREA:**

The proposed project parcel consists of ~37 acres of land extending along the western side of a small ridgeline which divides the Keolu Hills Region of Kailua from the Bellows Marine Corps Training Base in Waimanalo (**Exhibit 1**). The western and southern property boundaries of the project parcel abut a number of residential lots of the Kailua Bluffs Subdivision which includes single family residences and associated residential development (**Exhibit 2**) (e.g., landscaping, sheds, etc.). The project parcel is bounded to the north by the Keolu Summit Subdivision, a condominium regime which also includes a number of residential structures and associated development. The CCH Board of Water Supply has a water tank site that is also part of the northern property boundary; the water tank site is gated and fenced, with no site access from the project parcel. Access to the project parcel is via an unpaved access road (i.e., jeep road) which begins at the western edge of the parcels boundary that abuts Kanapu'u Drive (**Exhibit 3**).

The project site is zoned as both State Land Use (SLU) *Conservation* District – *General* Subzone, and the SLU *Urban* District (i.e., 30.22 acres *Conservation* & 6.67 acres *Urban*). The subject of this report, and submitted Conservation District Use Application (CDUA), will center on the portions of the proposed project that are located within the SLU *Conservation* District (**Exhibit 4**); on Oahu, lands situated within the SLU *Urban* District are under the regulatory authority of the City and County of Honolulu – Department of Planning and Permitting (CCH-DPP).

The project parcel was previously part of a cattle ranch of which remnants of animal husbandry practices can be found on the parcel (e.g., barb wire fencing, fence posts). There are existing rudimentary jeep roads which run throughout the property to a ridge-line “trail” that bounds the project parcel from the Bellows Marine Corps Training Area.

#### **CURRENT USE OF PROJECT PARCEL:**

##### ***Existing Biological Resources***

The project parcel is dominated by non-native and invasive floral and faunal species, including naturalized species, and various ornamental plants propagated along the western property boundaries.

During the biological survey, conducted in November 2013, it was determined that the diversity and composition of the floral species was identified as “typical” for low-land Oahu. In this area native species only accounted for 3% of the plants observed and identified; if Polynesian-introduced species are added, that number is raised to 8%. Within the project parcel the non-native vegetation included *Formosan Koa*, *Chinese Violet*, *Koa Haole*, *Kikuyu*, *Signal Grass*, and *California Grass*. 86 taxa of vascular plants were observed during the botanical survey, although none were considered of special interest or concern from a conservation perspective. OCCL staff visited the site to observe the character of the project parcel which includes mature trees, koa haole stands, and other vegetation types (**Exhibit 5**).

Five (5) avian point count stations were sited ~200m (650 ft.) apart along the length of the project parcel during the avian survey conducted in November 2014. The avian survey included a timed “point-count” at each station with field observations conducted using binoculars. A total of 142 individual bird species, representing 11 separate families, were observed and recorded during the station counts. All of the species observed and recorded are considered non-native or introduced species in Hawaii.

Although no seabirds were detected during the survey it is assumed that low numbers of several seabird species may flyover the project parcel on occasion. There are no known nesting colonies of any of the Oahu resident seabird species on, or within close proximity to the project parcel.

No Hawaiian Hoary Bats were detected during the course of this survey, and no species proposed for listing or listed under the federal endangered species act of 1973, as amended, or by the State of Hawaii under HRS 195D were observed or recorded during the survey. Additionally, there is no federally delineated *Critical Habitat* present on or near the property.

##### ***Existing Cultural, Architectural, and Archeological Resources***

The archeological investigation of the project parcel included pedestrian surveys of the site as well as limited subsurface excavation. Three (3) survey areas and two (2) linear survey corridors were selected for the pedestrian survey (**Exhibit 6**). During the initial survey several historic artifacts were encountered on the ground surface. The “artifacts”, found during the survey, included five (5) brass .30-06 blank rifle cartridges, dating to approximately 1943, and a single isolated artifact, a “Hazel-Atlas” ketchup bottle manufactured from 1920 to 1964. The brass cartridges recovered during the survey allude to the military use of the parcel during the 1940s.

No traditional or historic cultural sites, features, or materials were identified during the pedestrian survey, and no historic or cultural materials were uncovered during the subsurface investigation.

On *August 12, 2018* the OCCL submitted the SHPD Hawaii Revised Statutes (HRS) Chapter 6E form to the SHPD for review and processing. It was accepted by the Archeology Branch and is awaiting confirmation of “no historic properties affected” by the proposed project.

### **PROPOSED USE:**

This Conservation District Use Application (CDUA) represents a modification to a similar proposed project that was applied for in 2014 by the same landowner.

The current proposed uses being applied for include:

#### **Single Family Residence:**

The applicant is proposing to construct a two-story, three-bedroom SFR. The upper level will include a covered lanai and entry areas and will provide the primary 2,614 square feet (sq. ft.) of living space. The lower level will consist of a garage and a large storage room of approximately 1,700 sq. ft. Additionally, the SFR will include a pool, decking, concrete pads, and a retaining wall; all proposed development totals 4,939.17 sq. ft. which is just under the allowable MDA of 5,000 sq. ft., pursuant to Hawaii Administrative Rules (HAR) §13-5 (**Exhibit 7, 7a, 7b, 7c**).

#### **Access Road and Utilities:**

The proposed SFR will require the construction of a 1,220-ft. long access road that will be 20-feet wide (i.e., 16-ft. paved, with 2-ft. shoulders on each side) (**Exhibit 8, 8a**), however only 1,070-ft. will be built in the Conservation District. The total area of disturbance within the Conservation District for the access road will be approximately 1.6-acres or 70,000 sq. ft. Utilities for the proposed residence will be run either along the access road in trenches below ground or through the forest stewardship area and subsistence garden above ground. It is unclear what the dimensions of the trenching will be, or the specific development plans for the utilities. It was stated by the applicant that “permeable” materials will be used for the access road, although at this time no finalized plans for the specific style of road “surface” has been provided. Grading throughout the project parcel for the proposed access road will be approximately 4,700 cubic yards (cy) of excavation and 5,600 cy of fill; therefore, total ground moving proposed will be approximately 10,000 cy or 270,000 cubic feet. Staff notes the length of the access road requires the construction of drainage culverts at two (2) locations; at station 0+90, two (2) HDPE 36-inch corrugated drainage culverts will be placed to convey water into existing drainage, while at station 3+65, a 24-inch HDPE corrugated drainage culvert will also be used to convey water across the access road.

#### **Forest Stewardship and Conservation Area:**

The applicant is proposing to utilize 6-acres of the ~37-acre parcel for a forest stewardship project (**Exhibit 9**). The applicant is proposing to convert a portion of the parcels non-native dominated vegetation with native Hawaiian and canoe-plant lowland mesic forest species. The applicant has completed a *Forest Stewardship Management Plan (FSMP)* that has been accepted and approved by the *State of Hawaii Forest Stewardship Committee*. The required enrollment into the

program by the landowner ensures ongoing technical review and consultation can be provided during the 10-year period of implementation and management.

Nine (9) management “practices” are described in the FSMP:

1) fencing, 2) tree/shrub site preparation, 3) irrigation, 4) tree/shrub establishment, 5) groundcover establishment, 6) mulching, 7) weed control, 8) forest health and protection, and 9) monitoring.

**Fencing** will consist of the construction of 4-foot tall “hogwire” fence between steel “t-posts” and will require the removal of vegetation and clearing along the proposed fence line. OCCL staff notes that a total length of proposed fence was not provided in the application, but it will encircle the 6-acre restoration area and include gates for access. A proposed “fuel break” (e.g., cleared pathway) will be maintained at the width of approximately twice the height of adjacent vegetation along the fence line – the area of clearing has not been determined. The fencing will require some type of ongoing monitoring and maintenance to ensure it is functional and not damaged.

**Site preparation** consists of removing invasive species and digging holes for seedlings; small non-adjacent areas will be planted to create a “patchwork” of undisturbed and revegetated areas to complete the forest stewardship plan over the course of 10-years. OCCL staff notes that the total amount of clearing was not provided, including grubbing and grading, although it can be assumed to cover a majority of the 6-acre “stewardship” area.

**Micro-irrigation** is recommended in the FSMP to help seedling establishment; it was stated by the applicant that “*an irrigation specialist will be consulted*” for the development and planning of the irrigation lines which will be “*reusable and able to be moved*”. Staff notes no plans or designs were provided for the proposed irrigation lines or public water connection, and it is unclear what the annual water usage may be for the proposed FSMP.

**Tree and Shrub/Groundcover Establishment** refers to planting, which will be done by hand, using small hand tools or equipment. Natural fertilizers, such as chicken manure, will be used to establish seedlings while weed control will bolster seedling planting sites. OCCL staff notes that no site specific planting plan was provided, however, a general site planting scheme was included in the FSMP.

**Weed control** will be conducted as needed using hand tools; it was stated by the applicant that a rigorous plan of maintenance should be followed during wet times to maintain native plantings and eliminate invasive weed species.

**Forest Health and Protection:** The applicant states that “*soil erosion will be reduced, and rainwater infiltration will be increased*” through the implementation of the FSMP<sup>1</sup>. **Monitoring:** A progress statement of performance that includes overall percent (%) survival of reforested cells

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<sup>1</sup> OCCL staff notes that an increase in impervious surfaces could actually reduce overall infiltration of the project parcel during the first 10-years of the project while the forest restoration becomes established. Additionally, the large amount of land moving activities has the potential to increase soil erosion in the short term and will only be mitigated if the forest restoration is fully realized and produces a fully functional native forest area with appropriate soil improvements and groundcover establishment.

shall be provided, along with photographs of the site. Monitoring and maintenance of the fence perimeter will be on-going to ensure feral pigs are kept out of the stewardship area. OCCL staff notes that no specific monitoring schedule has been provided, and no project benchmarks have been discussed in which to determine the success or failure of the stewardship activities or proposed mitigation.

**Subsistence Farming:**

Approximately eleven (11) species of fruit trees will be planted in an area adjacent to, and below the proposed SFR (**Exhibit 10**). The applicant states that in addition to providing fruit for the family's use, the trees may provide a visual buffer from Kanapu'u Drive to the proposed residential development. Additional drip irrigation lines will be constructed for the establishment of plants, while rainwater collected from 'roof run-off' will be used to the extent feasible. It was stated that "organic gardening techniques" will be employed, using "natural composts as soil amendment".<sup>2</sup> Best Management Practices (BMP) for the subsistence agriculture include: using organic soil amendments to assist with new plantings; utilizing "weedy groundcover of a non-aggressive nature" to help establish new plants; all soil amendments, pest control and fertilizers will be natural and bio-degradable in composition. No chemical fertilizers or pesticides will be used; and mulch will be added where needed to prevent "weedy" growth around planting sites.

**Additional Project Details:**

Initially, the proposed project site will be connected to the Hawaiian Electric Company (HECO) grid, potable water utility, and City and County sewer via utility lines that run from Kanapu'u Drive to the proposed SFR site (**Exhibit 11**), although staff is unclear if lines will be trenched or run overhead through the forest stewardship and subsistence garden areas. Additional electric service will be provided by the placement of roof-top solar (i.e., photovoltaic panels attached to the SFR roof); the applicant aims to eventually utilize the PV panels to provide all energy needs for the property although no plans or proposals regarding PV have been presented.

Wastewater flows generated at the home site will be transmitted to the existing City and County of Honolulu 8-inch main through a 6-inch gravity sewer running laterally along the access road to a connection located on Kanapu'u Drive.

**SUMMARY OF COMMENTS:**

The Office of Conservation and Coastal Lands (OCCL) referred the application to the following state agencies for review and comment: DLNR - Division of Forestry and Wildlife (DOFAW), - Land Division (ODLO), - Engineering, the State Historic Preservation Division (SHPD), and the Commission on Water Resource Management (CWRM). Additional State Agencies include the State of Hawaii Department of Health and Office of Planning (OP). The application was also provided to the City and County of Honolulu - Fire Department (HFD), - Department of Planning and Permitting (DPP), - Department of Environmental Services (ENV), and the - Board of Water Supply (BWS) as well as the Kailua Public Library and the Kailua Neighborhood Board for review and comment.

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<sup>2</sup> OCCL staff notes that there were no plans or design schematics for the proposed irrigation lines, planting plan or the conveyance of collected rainwater.

***Comments received from the following agencies have been summarized by staff as follows:***

**DLNR – Division of Forestry and Wildlife (DOFAW)**

The proposed project includes the implementation of a Forest Stewardship Plan under the Forest Stewardship Program. Hawaii's Forest Stewardship Program, administered by DOFAW, provides technical and financial assistance to owners of nonindustrial private forest land that are interested in conservation, restoration, and/or timber production. The plan was approved by the State's Forest Stewardship Advisory Committee on 1/20/2017 and by DOFAW on 3/30/2017.

DOFAW supports the approved Forest Stewardship Plan, which includes the restoration of six acres of the property with ingenious and endemic plants. The goal for this plan is to transform a low-benefit, non-native dominated landscape into a native dominated lowland forest and shrub land with native, Hawaiian canoe, and agroforestry plants to improve habitat, increase biodiversity and a healthier ecosystem functioning. To achieve the objectives of the removing non-native species dominated landscapes and convert to native species dominated forest, the targeted management practices will suppress non-native species in the main planting areas, restore native plant species, control the feral pig population, manage the community interface areas, and mitigate the wildfire threat. To achieve the objective of improving the functioning of the watershed, the management approaches will be to reduce erosion and sedimentation and improve storm water runoff quality for the benefit of the downslope wetland ecosystem.

***Applicant Response:***

*We would like to thank DLNR's Division of Forestry and Wildlife for support of the MDHE LLCs Conservation District Use Application and their Forest Stewardship Plan. Stewardship for the area aims to increase biodiversity and a healthier ecosystem functioning, improve habitat, restore native plant species, control the feral pig population, manage the community interface areas, and mitigate threats of wildfire.*

***OCCL staff notes that DOFAW did not explicitly state they supported the development of a Single Family Residence, 1,070-foot long access road within the Conservation District, or the agricultural area next to the SFR. DOFAW states "we support the approved Forest Stewardship Plan" only, which was approved by DOFAW.***

**DLNR – Engineering**

The owner of the project property and/or their representative is responsible to research the Flood Hazard Zone designation for the project. Flood Hazard Zones are designated on FEMA's Flood Insurance Rate Maps (FIRM), which can be viewed on our Flood Hazard Assessment Tool (FHAT).

***Applicant Response:***

*Using the FEMA Flood Insurance Rate Map, the EA notes that the project is in Flood Zone Designation X: minimal flood risk, outside of 0.2 percent annual chance of floodplain.*

**DLNR – Land Division**

Agency had no comments on the proposed project.

**State of Hawaii – Department of Transportation (HDOT)**



No traffic assessment accompanied the Draft EA.

The Hawaii Department of Transportation determined the proposed action will not significantly impact the State Highway System – Kalanianaʻole Highway, Route No. 72.

***Applicant Response:***

*We acknowledge that the Hawaii Department of Transportation has determined that the proposed action will not significantly impact the State Highway System, particularly Kalanianaʻole Highway, Route No. 72.*

**State of Hawaii – Office of Planning**

OP acknowledges that the Draft EA provides a satisfactory analysis on the following issues: Utilities and Infrastructure, Floods and Tropical Storms, Stormwater Drainage/Low Impact Development, State Functional Plans, and Conservation Lands.

The following items will need further evaluation in the Final Environmental Assessment (Final EA):

***a) Hawaii State Planning Act, Hawaii Revised Statutes (HRS) Chapter 226***

The Draft EA's analysis on Parts I and III of the Hawaii State Planning Act is incomplete. Section 5.1, Pages 5-1 to 5-2 list the following statute applicable to this project:

- *HRS §226-11 – Objectives and policies for the physical environment – land-based, shoreline, and marine resources.*
- *HRS §226-13 – Objectives and policies for the physical environment – land, air, and water quality.*
- *HRS §226-18 – Objectives and policies for facility systems – energy.*

The analysis for Part II of the Hawaii State Planning Act, found in Section, 5.1.1 is complete. However, the Final EA will need to include discussion on the projects ability to meet all parts of HRS Chapter 226, which includes the remaining goals of Part I – the goals, objectives, and policies of the State Plan; and Part III – the Priority Guidelines.

The analysis of HRS Chapter 226 must examine the project's consistency with these statutes, or clarify where it is in conflict. If the applicant, MDHE, LLC, deems the remaining statutes in HRS Chapter 226 as not applicable to this project, the Final EA should affirmatively state such determination followed by discussion paragraphs.

***b) Hawaii Coastal Zone Management Program***

Section 5.4, page 5-4 examines the Hawaii Coastal Zone Management Program and lists the 10 objectives and policies. It states that the project area is not within the special management area (SMA) as delineated by the City and County of Honolulu; no SMA determination is required under State statute, and no SMA Permit is required under City and County of Honolulu ordinance.

The coastal zone management (CZM) area is defined as “all lands of the State and the area extending seaward from the shoreline to the limit of the State's police power and management

authority, including the U.S. territorial sea". The project site is indeed within the CZM area, and must demonstrate compliance with HRS §205A-2 within the HRS Chapter 343 submittal. Therefore, the Final EA should include a complete examination of all 10 of the objectives and policies listed in HRS §205A-2.

If there is a conflict with any of these objectives and policies, the Final EA should include what steps will be taken to be compliant. If it is determined by the applicant that this statute is not applicable to the project, the Final EA should state this and include discussion paragraphs clarifying this opinion.

***Applicant Response:*** In response to the Office of Planning's request to evaluation of the projects relationship and compliance with both the Hawaii State Planning Act (HRS 226) and the Hawaii Coastal Zone Management Program (HRS 205A), the Final EA has been revised.

***OCCL staff notes that the applicant claims most of the stated objectives and policies "are not applicable to the project". However, the applicant believes this proposed project is utilizing "Low Impact Development controls" to encourage storm water infiltration and minimize runoff. Staff has concerns that construction of a 1070-foot long access road within the Conservation District, ~10,000-yd<sup>3</sup> of earth moving, and the creation of a two (2) drainage culverts may not be considered "low Impact" when alternatives with potentially less environmental impacts could be adopted for this project.***

**City and County of Honolulu – Board of Water Supply (BWS)**

The existing water system is adequate to accommodate the proposed development. However, please be advised that this information is based upon current data, and therefore, the Board of Water Supply reserves the right to change any position or information stated herein up until the final approval of the building permit application. The final decision on the availability of water will be conformed when the building permit application is submitted for approval.

When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

The developer should investigate the feasibility of using non-potable water for irrigation of the proposed garden portion of the development. If non-potable water is either unavailable or infeasible, a report of the investigation, including proposed irrigation demands, should be submitted to us before we will consider the use of potable water.

The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

***Applicant Response:*** We acknowledge your comment that the existing water system is adequate to accommodate the proposed development. We recognize that this assessment may change and that the Board of Water Supply reserves the right to change any position or information until the final approval of the building permit application. It is understood that the final decision regarding the availability of water will be confirmed when the building permit application is submitted.



*Thank you for your suggestion regarding the use of non-potable water for irrigation purposes. We will investigate the feasibility of this arrangement, and we recognize that the Board of Water Supply will require a report of the investigation, including proposed irrigation demands, should the use of potable water be decided upon for irrigation purposes.*

City and County of Honolulu – Department of Transportation Services

Parking and Access Road. The following comments are related to parking:

- a. The DEA on page 3-18 states that the project will require parking on site, and that a designated parking area will be created to support the residential use at the home. No mitigation measures are proposed. Provide the number of proposed parking spaces to be located in the designated parking area. Clarify if the parking spaces use permeable paving, and if not, analyze the impacts of impermeable surface parking with respect to the environmental harms associated with parking facilities, including storm water runoff.
- b. The Department of Transportation Services (DTS) supports the use of permeable surfacing materials or gravel for the proposed access road.

***Applicant Response:** The parking spaces to be provided on site will include the 2-car garage under the home and two (2) temporary parking spots near driveway apron. The intention is to use permeable paving which can be finalized following plan review with the Honolulu Fire Departments Planning Branch.*

*We appreciate the information on complete streets improvements; as the project will be constructed on private land with a designated access point, there will be no long-term impact on City Streets. The project will comply with all permit conditions including staging of construction material and equipment, vehicle and pedestrian safety at the site entry/egress, and Best Management Practice controls to prevent the trailing of dirt and debris on City roadways.*

City and County of Honolulu – Honolulu Fire Department (HFD)

The HFD requires that the following be complied with:

1. 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-feet (46 meters) from fire department access roads as measured by an approved route around the exterior of the building or facility.

A fire department access road shall extend to within 50-feet (15-meters) of at least one exterior door that can be opened from the outside and that provides access to the interior of the building.

2. 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 thereof, are hereafter constructed, or moved into or within the county. When any portion of the facility or building is in excess of 150-feet 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 Authority Having Jurisdiction (AHJ).

3. Submit civil drawings to the HFD for review and approval.

***Applicant Response:*** *The project will meet all National Fire Protection Association Fire Code including access road proximity to the home and provision of adequate water supply meeting HFD requirements. Civil engineering drawings will be submitted to the HFD for review and approval.*

**Forest Solutions, Inc.:**

Our comments refer to the improvement in environmental quality resultant from the proposed actions.

The area contemplated for native dryland forest restoration is mostly devoid of its original vegetative cover, having been replaced by a multitude of non-native species, especially grasses and weedy shrubs. Actions within the management plan and the proposed CDUA, duly carried out will, without doubt, improve the environmental quality of this project area. This work is nothing short of rebuilding a forest from the bottom up, **a task that will take decades to complete.**

The dryland forest is sorely needed. Due to human settlement and constant fire pressure, dryland forest ecosystems are the most imperiled in the State and continue to face threats, especially from fires and climate change. Actions such as the ones proposed here, in aggregate, can change this pathway toward some modicum of survival. On Oahu and in the midst of urban development this is something to celebrate.

Forest solutions, therefore supports the adoption of the draft environmental assessment and approval of the relevant CDUA.

**O'ahu Resource Conservation & Development Council:**

O'ahu RC&D is an agriculture and conservation non-profit that assists farmers, ranches and landowners in managing natural resources. In May 2016, O'ahu RC&D drafted a conservation plan for this site, including a 0.6 acre area designated for subsistence agriculture. The plan was amended July 2016 and approved by the *Windward Oahu Soil and Water Conservation District*. The conservation plan included **general management strategies** that assist in reducing erosion and runoff, including practices like vegetative barriers, tree/shrub establishment, drip irrigation, and mulch.

Recommendations included in the conservation plan were based on guidelines established by the USDAS-Natural Resources Conservation Service, and the landowner is responsible for ensure that practices are implemented in a way that follows local, state and federal laws.

We understand the Horn Family is seeking a CDUP. We support the Horn Family in seeking such permits and implementing their conservation plan with the intent of reducing erosion and managing water runoff while 'stewarding' the natural resources on their property

**Public/Community Comments:**

OCCL staff notes that there were a large number of public comments submitted to OCCL for this proposed project; over 400 pages of comments, plans, printed and copied rules and laws, and diagrams were provided in both support of the proposed project and against the proposed project. Based on a review of the submitted comments, the public appears to be split 50/50 (approval/denial). Staff presents an outline of the salient comments provided for this project; full comment submissions and applicant responses to each commenter are provided in the Final EA. A copy of the Final EA can be reviewed at:

[https://dlnr.hawaii.gov/occl/files/2018/09/Kanapuu\\_FEA\\_091018.pdf](https://dlnr.hawaii.gov/occl/files/2018/09/Kanapuu_FEA_091018.pdf)

Although there were supportive comments for the project, staff has outlined the more detailed common concerns the public presented either during the comment period or the public hearing.

**Topic: Proposed Residence should be built in the parcels Urban District portion, not within Conservation District lands.**

**Applicant Response:**

- *The 2018 EA for the proposed project analyzes alternative home sites in Chapter 4 of the EA. The alternatives analysis evaluates home sites "B" and "K" which lie in the parcels State Urban District lands. Site B would require an access driveway through the Conservation District of approximately ½ mile (~2600 ft.) and therefore was eliminated from consideration.*
- *Additionally, a City-owned 54-inch culvert installed during the 1980 development of Kailua Bluffs lies at the entrance to the subjacent parcel; the need to retain the existing drainage pattern limits the buildable area near the Kanapu'u Drive frontage, thus eliminating this site as an alternative.*

**Topic: Flooding, land erosion and grading will be detrimental to the surrounding properties.**

**Applicant Response:**

- *The proposed projects approved Conservation Plan includes the Natural Resource Conservation Service's Conservation Practice Standards for installation of an access road. The landowner is committed to maintaining the BMPs and minimizing down gradient impacts, as well as to improving soil conditions over the long-term through implementing Forest Stewardship and Conservation practices.*
- *Impacts from increased storm water runoff and erosion from hard surfaces on existing drainage structures has been detailed in the draft and final EA. The potential increase in runoff under the 10-year, 1-hour intensity storm (i.e., 50-year) could be 2.1 cfs – the applicant believes this is within the capacity of the existing culvert established for drainage of the subdivision which is 16 gallons/second (i.e., 57,600 gallons per rainfall hour).*
- *Reforestation and restoration with native plants is known to minimize erosion, improve soil conditions, and thus reduce erosion and sedimentation of downstream regions. The*

*existing non-native dominated forest consists of invasive species that are known to deplete nutrients needed for soil health. Another benefit achieved by increasing plant diversity is creation of different layers within an area (e.g., groundcover, shrub layer, tree layer) which can better diffuse rainfall and allow for absorption to soils.*

**Topic: Storm water runoff will affect Enchanted Lake Marsh Land and eventually Kailua Beach.**

***Applicant Response:***

- *Drainage runoff in the parcel's drainage basin for the proposed project includes an increase of 2.1 cubic feet per second (cfs) over the existing conditions (based on the 50-year interval, 1-hour duration rainfall, in keeping with Department of Planning and Permitting rules relating to Storm Drainage Standards).*
- *Kaelepulu Pond and Kawai Nui Marsh lie in separate watersheds. Offsite work is being done to restore and reconnect flow from Kawai Nui south to Kaelepulu in the vicinity of Hamakua Marsh. Kaelepulu Pond was a wetland before being dredged in the 1960s to create a water feature central to the "Enchanted Lake" development. Water from Kaelepulu Pond drains to Kailua Beach Park through the City managed Kaelepulu Canal.*
- *The Horn parcel constitutes a small amount (about 0.16%) of the 978-acre Ka'elepulu watershed. This watershed is occupied by 3,515 residences, 10 acres of commercial development, 4 schools, 24 miles of public roads, and 8 miles of storm drains.*

**Topic: The project will be a visual intrusion, or will impact significant viewplanes.**

**OCCL staff notes the proposed SFR will be built upon a concrete slab located at approximately 244-feet above sea level (asl) with a height of the SFR reaching approximately 264-268 ft. asl. It should be noted that the elevation of the ridgeline is measured to be approximately 275-ft. asl just east of the proposed SFR location, diminishing to the 250-ft. asl range along the ridgeline to the north of the project site.**

***Applicant Response:***

- *The draft EA and Final EA state that the home will be most visible from within the Kailua Bluffs subdivision along a small portion of Kanapu'u Drive. The site of the residence will be tucked among mature trees below the primary ridge. No significant public views will be impacted.*
- *The home site will be at a lower elevation than the existing Keolu Summit development located north of the subject parcel. The home will not be visible from Kahako Street and will not be visible from the coastal areas makai of the project site (i.e., Waimanalo, Bellows).*
- *Distant views of the access road will be screened by natural vegetation growth over time.*
- *Over time, the access road will be screened by native trees and shrubs planted in the restoration area. No significant impacts to scenic vistas or existing open preservation landscapes are anticipated.*

**ANALYSIS:**

Following review and acceptance for processing, the Applicant's Agent was notified, by letter dated May 2, 2018 that:

- The proposed construction of a Single Family Residence and associated development is an identified land use in the Conservation District *General Subzone* pursuant to Hawaii Administrative Rules (HAR) §13-5-24, R-7 (D-1) *A single family residence that conforms to design standards as outlined in this chapter; and*
- In conformance with Chapter 343, Hawaii Revised Statutes (HRS), as amended, and Chapter 11-200, HAR, a *Draft Environmental Assessment* (DEA) has been submitted for this proposed use;
- Pursuant to HAR §13-5-40 Hearings, a public hearing will be required for this project; and
- Please be informed that, the applicant's responsibility includes complying with the provisions of Hawaii's Coastal Zone Management law (Chapter 205A, HRS) that pertain to the Special Management Area (SMA) requirements administered by the various counties. Negative action by the BLNR on this application can be expected should you fail to obtain and provide us, at least thirty (30) days prior to BLNR action, one of the following from the appropriate county:
  1. An official determination that the proposal is exempt from the provisions of the county rules relating to the SMA;
  2. An official determination that the proposed development is outside the SMA; or
  3. An SMA Use Permit for the proposed development.

Notice of the Draft Environmental Assessment (DEA) was published in the May 23, 2018 issue of the Office of Environmental Quality Control (OEQC) publication the *Environmental Notice*; and

A notice of a Finding of No Significant Impact (FONSI) for the proposed Single Family Residence (SFR) Final Environmental Assessment (FEA) was published in the September 23, 2018 issue of the OEQC publication the *Environmental Notice*. In the FONSI publication letter to OEQC, the OCCL states:

*OCCL staff notes that there are two (2) outstanding issues relating to the potential effects of the proposed project on the environmental and natural resources of the area. Issue 1) relates to the location of the proposed Single Family Residence (SFR) that is sited at an elevation which may impact viewplanes, and Issue 2) which relates to the proposed cut and fill amounts from the construction of a 1,220-foot long paved access road. Staff believes there may be alternatives for the location of the SFR that were discussed<sup>4</sup> in the Draft Environmental Assessment (DEA) that would be environmentally preferable to the proposed location<sup>3</sup>.*

<sup>3</sup> The environmental assessment did not discuss a site that OCCL believed would be suitable for a single-family residence. This matter is addressed in the Discussion section of this report.

<sup>4</sup> Staff notes the FONSI letter should have read "were not discussed" instead of "were discussed".

**Public Hearing:**

Due to the public concern regarding the proposed project, a Public Hearing was held by the OCCL on *Wednesday, June 13, 2018* at the Kailua High School. Notice for the public hearing was placed in the Honolulu Star Advertiser newspaper on *May 23, 2018*. Approximately 20-30 persons attended the meeting, while only 8 testified; public comments and the applicant's response to those comments are presented in the previous section of this report.

**§13-5-30 CRITERIA:**

The following discussion evaluates the merits of the proposed land use by applying the criteria established in HAR §13-5-30.

- 1) *The proposed use is consistent with the purpose of the Conservation District. The objective of the Conservation District is to conserve, protect, and preserve the important natural resources of the state through appropriate management and use to promote their long-term sustainability and the public health, safety and welfare.*

The applicant states that the ~37-acre parcel is a currently vacant remnant of rezoning for the Kailua Bluffs Subdivision that occurred in the 1980's. Since taking ownership, the landowner worked with neighboring home owners and OCCL to resolve 12 encroachments violating Conservation District rules on approximately 3.5 acres of Conservation District Land. The landowner has received permission from the OCCL for trash removal, minor hand clearing of invasive species, and to facilitate access to members of the Pig Hunters Association of Oahu to trap and remove feral pigs. The landowner seeks to bring full-time presence to the site by constructing a single family residence that conforms to design standards in HAR §13-5.

The landowner is committed to transforming a 6-acre area of low-benefit, non-native dominated vegetation to a native and Hawaiian canoe-plant dominated mesic forest over a 10-year period. In addition to improving plant diversity on the site, soil erosion will be reduced and rainwater infiltration will be increased with improved soil conditions. The landowner worked with a forestry consultant to develop a Forest Stewardship Management Plan that was approved by the Forest Stewardship Committee in January 2017, contingent upon receiving the appropriate CDUP.

OCCL staff notes that the proposed project includes the construction of a ~5,000 sq. ft. residence with parking areas, turnaround driveway, a 1,070-ft. access road within the Conservation District that requires ~10,000 cubic yards of cut/fill in order to be functional, drainage culverts (2), trenching or poles for utilities, fence construction, clearing for a firebreak and for the fence line, irrigation appurtenances, water supplies to the forest area and subsistence agriculture site, and soil preparation and amendments. Staff believes that this project could benefit conservation values with proper siting of the residence and minimization of grading, and provided that the applicant implements all portions of the FSMP, and all other proposed mitigation measures. However, staff believes that the proposed project with the residence near the ridgeline, that includes a long access road, does not seek to mitigate impacts to conservation district resources, and therefore does not



comply with Section 13-5-30(c)(5) of the Conservation District Administrative Rules, which states as follows:

*"The proposed land use, including buildings, structures, and facilities, shall be compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels," and Criteria # (6) "The existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable."*

- 2) *The proposed land use is consistent with the objectives of the Subzone of the land on which the use will occur.*

The applicant states that the project parcel is located within the Conservation District *General Subzone* which is intended to "designate open space where specific conservation use may not be defined but where urban use would be premature", and identifies "lands suitable for farming, flower gardening, grazing; including facilities accessory to these uses when the facilities are compatible with the natural physical environment". The proposed land uses are consistent with the objectives of the *General Subzone* in that a majority of the parcels "open space" will be preserved, and where disturbed, will be enhanced using native species and consistent vegetation management. However, staff notes that the project, as planned, introduces new elements to the land that will result in environmental impacts; these impacts could be mitigated with proper siting of the SFR.

- 3) *The proposed land use complies with the provisions and guidelines contained in Chapter 205A, HRS entitled "Coastal Zone Management", where applicable.*

The entire State of Hawaii falls under the Coastal Zone Management (CZM) area, however, the project parcel is not located within the City and County of Honolulu - Special Management Area (SMA) as described in HAR Ch. 205A.

Recreation: This project lies approximately 1.5 miles from the nearest shoreline area and therefore does not influence access to coastal recreational opportunities.

Historic: The applicant claims that no known pre-contact resources currently exist on the property, and the Cultural Inventory Assessment conducted for the project revealed no cultural activities have taken place on the parcel. Historic use of the parcel includes cattle ranching, as evidenced by remnant barbed wire fencing. Other historic artifacts found on the property include five brass .30-06 caliber blank rifle cartridges dating to 1943, and a Hazel-Atlas glass ketchup bottle manufactured between 1920 and 1964. All items were collected from the ground surface during the Archeological Inventory Survey.

The State Historic Preservation Division (SHPD) reviewed the Archeological Assessment (AA) prepared for the project area in 2014. SHPD requested revisions to the AA; the document was updated and re-submitted. SHPD requested further information: a description of the scope of work; a map showing previous archeological investigation in the general area; and a map of the project area. The applicant's agent provided these items to SHPD in 2017.

Scenic and Open Space: The applicant claims the SFR with surrounding landscaping will fall within the maximum developable area of 5,000 sq. ft. within the 36.9 acres. Nearly all (99.7%) of the parcel will remain open space. Portions of the home's roofline are anticipated to be visible from distant points in Kailua, and will reveal the home's elevation will be below that of the Keolu Summit subdivision homes north of the parcel.

The applicant states that a Visual Resources Assessment in the submitted EA provided anticipated views from close and distant points, and notes that the selected home site will be most visible from within the Kailua Bluffs subdivision along a small portion of Kanapu'u Drive near the road crest north of the 1711 access point. Distant views of the access road will be screened by natural vegetation growth over time.

The selected home site is purposefully below the ridgeline to avoid silhouette against the skyline from any vantage point. According to the applicant, the home will not be visible from Kahako Street, the adjacent Marine Corps training area, Waimanalo, or from any coastal area. From vantage points both mauka and makai of the project site, the property will generally appear as a continuation of vacant preservation lands.

*OCCL staff has concerns regarding the assertion that viewplane impacts will be minimized by the current and planned vegetation on the site. The clearing required for the 20-foot wide 1,220-foot long access road (with 1,070 within the Conservation District) will obviously be visible from locations adjacent to the parcel. Additionally, staff notes that the development of a PV system on the roof would require open areas to the south and south-west to obtain the necessary sunlight. Clearing for the subsistence farm are will also remove "screening vegetation" – potentially making the development more visible.*

*OCCL staff also notes that the local viewplanes or natural vistas of the ridgeline have a common good to the community and may be considered significant in terms of their scenic value to the residents of this community.*

Managing Development: HAR §13-5 limits development to one single family residence per parcel. By definition, a SFR is limited to one kitchen, and is not to be used for rental or commercial purposes. Exhibit 4 of HAR §13-5 specifies the maximum developable area (MDA) of 5,000 square feet for parcels larger than one acre. Thus, the development on 5,000 sq. ft. for the SFR on the 37-acre parcel will occupy 0.3% of the parcel.

*OCCL staff notes that pursuant to HAR §13-5, the MDA considers only living areas of the proposed SFR and does not include the area of impact associated with the access road, culverts, fencing, firebreak, parking areas, turnarounds, subsistence agriculture, and forest restoration areas. The proposed land impacts total closer to +7-acres which is approximately 20% of the parcel.*

Public Participation: The applicant states that upon taking ownership of the parcel, the landowner mailed letters to all neighbors containing contact information for MDHE LLC and outlining planned management activities. A website was established to provide information on the project: [www.1711kanapuu.com](http://www.1711kanapuu.com). The website allows interested parties

to register themselves for electronic updates. A presentation on the project was made to the Kailua Neighborhood Board at its March 2015 meeting.

OCCL staff held a public hearing for this proposed project in order to solicit public testimony. Out of the approximately 20-30 attendees, only 8 testified; 6 were opposed to the project and 2 were in support of the project. Common themes in the testimony were present regarding the proposed project, typically the location on the ridge, the anticipated erosion and runoff changes, and noise were the concerns most repeated. These comments were submitted to the applicant in order to provide responses to comments, and include updated information into the Final EA.

- 4) *The proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region.*

The parcel was affected by unauthorized encroachments into the Conservation District as explained earlier in this application. The landowner removed a variety of materials dumped on the site, and with approval from OCCL, has initiated removal of invasive plants. The landowner has also facilitated removal of feral pigs through coordination with the *Oahu Pig Hunters Association*. Overall, the landowner's goal to transform approximately 6 acres of the central gulch to a native and Hawaiian "canoe" plant dominated area will be a benefit to the Conservation District lands.

Technical input has been provided on forestry and soil conservation uses from DLNR DOFAW and its Forest Stewardship Committee, and from the Windward Oahu Soil and Water Conservation District. Invasive species removal and native plantings will be conducted per the guidance in the approved plans: using hand tools, digging individual holes for seedlings with pick axe or gas-powered auger immediately before planting. The removal and planting pattern will utilize small, non-adjacent areas to create a patchwork of undisturbed and revegetated areas within the 6-acre restoration area. The proposed uses are consistent with the Conservation District, and the parcel's landowner seeks a full-time presence on the parcel to facilitate the long-term forest stewardship project.

As described under "Storm Water Drainage", above, a 54-inch storm drain culvert on the parcel lies within the Urban District and is owned and maintained by City and County of Honolulu (CCH). Following CCH Storm Drainage Standards (2017), the current runoff was calculated to be 93.7 cfs at the 10-year, 1-hour interval in the parcels central 22-acre drainage basin. Under proposed conditions (home site and access road constructed), runoff is calculated at approximately 95.3 cfs for the 10-year, 1-hour interval. At the potentially higher intensity 50-year, 1-hour storm event, runoff could be 127.1 cfs. The potential increase in storm water runoff due to the proposed home development is 2.8%. Runoff under proposed conditions under the higher intensity storm conditions is within the culverts design capacity of 128.8 cfs.

The culvert is in the Urban District and within the jurisdiction of CCH Department of Planning and Permitting (DPP). Submittal of final plans for building, grading and trenching permits will be reviewed by DPP to ensure compliance with storm drainage standards. The MDHE drainage area of 22 acres constitutes approximately 5% of the

larger 425-acre drainage area that flows into the Kapa'a Silt Basin, which ultimately discharges to Kaelepulu Pond. And of the larger 978-acre watershed that drains to Kaelepulu Pond, the 22-acre drainage area of the MDHE parcel constitutes approximately 2.2%.

Construction permits for the home site and access road will comply with recently revised City and County of Honolulu Rules Relating to Water Quality establish minimum requirements for the selection, design, implementation and maintenance of Best Management Practices (BMPs) to protect receiving waters from pollutants associated with land disturbance and land use. Storm water runoff collected from the home's roof will be routed by downspouts to rain garden areas, or planter boxes to prompt infiltration to soil.

The applicant states that once construction is complete, long-term drainage controls will be in place and landscape plantings around the home site will stabilize soils. Long-term soil conditions at this property are anticipated to be improved through native plant introduction and increased plant diversity.

*OCCL staff notes that a Finding of No Significant Impact (FONSI) was provided to the Final EA after review by this office. However, it was noted that there were issues that the OCCL had with the project that may be considered an "impact", although not "significant".*

- 5) *The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels.*

The parcel is surrounded on its south, west and north boundaries by approximately 81 single family homes built at elevations ranging from 200 feet asl to 260 feet asl. The single family home will be partially screened from the west by mature trees on site, and will adhere to the residential standards of HAR §13-5 Exhibit 4. The applicant states that the plantation style home (with covered lanai) will be similar to the predominately two-story homes in the Kailua Bluffs subdivision but will be largely out of view due to its siting.

*Staff also notes that a majority of the 81 homes that bound the subject parcel are at or below 220-ft. elevation.*

The 1,220-ft. access road begins in the Urban District and will contour up following fragments of a previously graded dirt road "network". Excavation will utilize embankments where needed for stabilization. Use of permeable surfacing material such as "Grasscrete" or gravel paving will be considered and determined during the City and County construction permit phase. The parcel's street frontage in the Urban District will be fenced and the access drive gated.

*OCCL staff notes that the placement of "Grasscrete" is an impact heavy construction activity that requires major amounts of grading, placement of substrate for drainage, and concrete pouring. Establishment of the "grass" portion of the Grasscrete could take up to*

*two years and will require on-going maintenance to be successful. Moreover, if Grasscrete cannot be used due to engineering issues/cost, then the access road would likely be concrete.*

*Due to the siting of the residence near the ridgeline, staff questions whether the project is compatible with the locality and surrounding areas, and appropriate to the physical conditions and capabilities of the specific parcel or parcels.*

- 6) *The existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable.*

The applicant states that the majority of the parcel, 99.7%, will remain as open space. Please see #4 above, for a description of benefits to the vegetative and soil resources of the site **anticipated** from the implementation of the approved FSMP and site's Conservation Plan, approved by the Windward Oahu Soil and Water Conservation District.

*OCCL staff notes that currently there is no development on the parcel; the only visible feature is a grass lined "jeep trail" that has been on the parcel since its creation. If approved the property will include a 1,220-ft. long, 20-foot wide access road (with 1,070-ft. in the Conservation District), a six-acre fenced area with clearing around the perimeter for a fire-break, a cleared area for the development of a SFR and parking area, and clearing for the establishment of a "subsistence farm" next to the SFR. Staff believes this proposed development will undoubtedly alter the current character of the site as "undeveloped".*

- 7) *Subdivision of land will not be utilized to increase the intensity of land uses in the Conservation District.*

The proposed project does not involve the subdivision of Conservation District land.

- 8) *The proposed land use will not be materially detrimental to the public health, safety and welfare.*

The applicant states that the proposed project lies entirely on privately owned lands with no legal public access. BMPs to minimize and manage both short-term construction impacts, as specified in various City and State permits, and longer-term erosion and storm-water controls, will be implemented and monitored by the appropriate agencies. Permitting the uses will bring full-time presence to the parcel including transformation of low-value introduced vegetation to native and indigenous plants in the parcel's central portion.

*OCCL staff notes that a number of proposed land uses have not been fully realized or described by the applicant other than to provide general plans and practices. Additionally, as the access road surface material has not been determined staff cannot estimate the potential influence of runoff and soil erosion to the nearby wetlands.*



**CULTURAL AND HISTORICAL IMPACT REVIEW:**

1) The applicant states that a Cultural Impact Assessment (CIA) was conducted for the project site – the EA contains the full CIA report. The findings from the CIA included identification of portions of two Land Commission Awards documented in the project area (LCA 44:2 & LCA 4452-12). CIA inquiry was published and requested from key members of the Kailua community. The majority of contacted organizations and individuals did not respond to the cultural impact assessment inquiry for the property, but three respondents from the Kailua community voiced the possibility for historic cultural sites to be located on or near the property. However, no additional information was evident from the organizations contacted, newspaper, archival research, and interviews with informants.

2) The applicant states that no impact is anticipated as no cultural activities were identified to occur at the site based on the CIA and other cultural review materials it appears that this site has not been used for any traditional practices during post-contact times. The history of the parcel is that of animal husbandry and development; studies show that the majority of cultural sites occur along the coast, within the Bellows military base property The CIA states "...it is reasonable to conclude that, pursuant to Act 50, the exercise of native Hawaiian rights, or any ethnic group, related to traditional cultural practices including gathering, access, cultivation, the use of traditional plants, oli (chanting), making traditional-type tools, and access to the ocean will not be impacted by the proposed....property project..."

3) The applicant claims that there is no feasible action that could be taken by the Board of Land and Natural Resources to reasonably protect Native Hawaiian rights related to this application, as no such resources are known to exist. OCCL staff notes that during the processing of this application, no comments in regard to traditional or cultural customs were received from native practitioners, and the Office of Hawaiian Affairs did not provide any comments regarding this CDUA. To the extent to which traditional and customary native Hawaiian rights are exercised, the proposed action does not appear to affect traditional Hawaiian rights; it is believed that no action is necessary to protect these rights.

**DISCUSSION:**

This Conservation District Use Application (CDUA) is being pursued by the landowner to develop the subject parcel with a Single Family Residence (SFR) (**Exhibit 12 - Site A**), a 1,070-ft. long access road within the Conservation District, two (2) drainage culverts, fencing in of 6-acres, a cleared firebreak around a 6-acre area, forest restoration (which includes plant removal, plant establishment, grubbing, and irrigation), parking and turnaround area at the SFR, and a 26,000 sq. ft. subsistence "garden" with associated irrigation, soil amendments, and plant establishment. Additional uses include rain catchment and conveyance, retaining walls, and landscaping around the proposed SFR.

Staff notes that a Finding of No Significant Impact (FONSI) was determined for the Final EA, however, it was stated by this office that:

*OCCL staff notes there are two (2) outstanding issues relating to the potential effects of the proposed project on the environmental and natural resources of the area. Issue 1) relates to the location of the proposed Single Family Residence (SFR) that is sited at an elevation which may*



*impact viewplanes, and Issue 2) which relates to the proposed cut and fill amounts from the construction of a 1,220\*-foot long paved access road. Staff believes there may be alternatives for the location of the SFR that were discussed<sup>5</sup> in the Draft Environmental Assessment (DEA) that would be environmentally preferable to the proposed location<sup>4</sup>.*

*\* Total length of road is 1220 ft.; total length of road in Conservation District is 1070 ft.*

### **Alternative Sites (Exhibit 13)**

**Site B** was sited in the Urban District portion of the parcel, approximately 2500-feet from the nearest access road (Kanapu'u Drive). Development of this site would require major road and drainage construction through the Conservation District to access the area.

**Site C** is located on a steep bluff area that would take an inordinate amount of earth moving to provide a level construction surface for the proposed SFR.

**Site M** is located at the crest of the ridge and would be visible from vantage points around the parcel.

**Site K** is located in the Urban District but is directly on top of the existing drainage culvert that is managed by the City and County of Honolulu. This location would not be feasible *as the need to retain the existing drainage pattern limits the buildable area.*

**Site S** is sited lower in elevation than the applicant's preferred site and would require a shorter access road. The applicant eliminated this alternative due to the large amount of fill required to provide the level building envelope.

None of these sites appear to be suitable locations for the applicant's single family residence.

**Site A** is the applicant's preferred alternative. However, staff believes this site is not suitable for the development of a single family residence when considering the development standards set forth in the Conservation District Administrative Rules, Section 13-5-30(c) "Criteria," and Single Family Residential Standards (Exhibit 4), for the following reasons:

### **Viewplane Impacts – Single Family Residence**

Section 13-5-30(c)(5) of the Conservation District Administrative Rules states as follows "The proposed land use, including buildings, structures, and facilities, shall be compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels," and Criteria # (6) "The existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable."

The applicant states that a Visual Resources Assessment in the submitted EA provided views from close and distant points, and notes that the selected home site will be most visible from

<sup>4</sup> The environmental assessment did not discuss a site that OCCL believed would be suitable for a single-family residence. This matter is addressed in the Discussion section of this report.

<sup>5</sup> Staff notes the FONSI letter should have read "were not discussed" instead of "were discussed".

within the Kailua Bluffs subdivision along a small portion of Kanapu'u Drive near the road crest north of the 1711 access point. Distant views of the access road will be screened by natural vegetation growth over time.

The applicant further states that the selected home site is purposefully below the ridgeline to avoid silhouette against the skyline from any vantage point, and that the home will not be visible from Kahako Street, the adjacent Marine Corps training area, Waimanalo, or from any coastal area. The applicant further states that the development will *generally* appear as a continuation of vacant preservation lands viewed from vantage points both mauka and makai of the project site.

However, staff has concerns regarding the finding that viewplane impacts will be minimized, or the situation will result in the appearance of "*continuance of vacant preservation lands*." The site is approximately 244-feet above sea level (asl) with a height of the SFR reaching approximately 264-268 ft. asl. It should be noted that the elevation of the ridgeline is measured to be approximately 275-ft. asl just east of the proposed SFR location, diminishing to the 250-ft. asl range along the ridgeline to the north of the project site. Thus, the development is in the vicinity of the ridgeline and will require substantial clearing which could potentially result in negative visual effects.

The clearing required for the 20-foot wide 1,220-foot long access road (with 1,070-ft. within the Conservation District) would be visible from locations adjacent to the parcel. Additionally, staff notes that the development of a PV system on the roof would require open areas (free of tall trees) to the south and south-west to obtain the necessary sunlight. As stated by the applicant "*The single-family residence will produce the majority of its electrical need from a renewable energy source*"; a clear open sky is a requirement for PV systems. We also believe that clearing for the 26,000 sq. ft. subsistence farm area will also remove existing "screening vegetation" that was stated to mitigate the viewplane impacts, and planned vegetation could take 10-20 years to develop into a proper "screen" for the SFR. Mitigation of viewplane impacts appears to be reliant upon the development of new growth, and proposed planting that has no assurances of being completed. Moreover, mitigation is reliant on the applicant actually implementing the work after the single family residence is constructed.

#### Access Road Construction Impacts

Staff has concerns that the total amount of earth moving (~10,000 cubic yards or 270,000 cubic feet), the required drainage culverts and structures, impervious surface influence on runoff, and the need for retaining walls along the length of the proposed access road constitute a large impact to the natural resources of the site. The development of a 20-foot wide access road with trenched utility lines, drainage appurtenances, and an unknown road surface treatment does not appear to be attempting to minimize the impacts associated with this development and could lead to greater issues in the future as conditions change. Additionally, the proposed access road does not appear to be compatible with the Single Family Residential Standards set forth in HAR §13-5, Exhibit 4, which states as follows: "Grading/contouring of property kept to minimum with consideration of slope".

Alternative Site Not Considered by the Applicant

During a site visit to the project area, staff from OCCL visited a location on the parcel that we believed to be a viable alternative site for the proposed SFR (**Exhibit 12 – Site “O”**). Site “O” is lower in elevation than the preferred site (**Exhibit 12 – Site “A”**), and would require a shorter access road, thus reducing the runoff and erosion potential. The site is relatively level, thus requiring less grading. Staff has urged the applicant on several occasions to consider this site as the preferred location for the residence and was surprised when it was not included in the environmental assessment as a potential house site. Rather, the applicant evaluated five other sites that staff considers impractical.

**Note: It appears Site “O” (Exhibit 12) was determined not to be an alternative for the proposed SFR location due to the applicants request for “reasonable accommodation” and the resolute requirement by the landowner/applicant that the SFR be sited higher on the ridgeline.**

Reasonable Accommodation

The applicant asserts a medical condition constrains her choices for a home site to the higher elevations of the project parcel. Although we are unable to disclose the specific medical issues, the applicant indicates the following criteria were used for the siting of the proposed SFR:

- Clear air flow;
- Reduced area of dampness; and
- Physical distance from irritant plants and chemical products.

The applicant indicates that the lack of these conditions prohibits her from living at Site “O” (**Exhibit 12**).

The OCCL has never entertained a request for reasonable accommodation in the context of a CDUA, and this is an unprecedented situation.

To gain more insight into this issue, staff met with the *U.S. Department of Housing and Urban Development*, the *Hawaii Civil Rights Commission*, and the *DLNR Civil Right Specialist*. Staff learned that the Board of Land and Natural Resources (BLNR) were under no obligation to grant a permit for the residence at the applicant’s preferred location without justification. However, it was recommended that staff should consider her situation seriously and weigh the pros and cons of locating the house at the applicants preferred site vs. a site at a lower elevation. Unfortunately, the applicant has not provided staff with any scientific or analytical criteria regarding safe proximity to irritants, appropriate levels of dampness, or the necessary airflow at various sites, so we have no basis on which to evaluate the merits of the applicants needs in relation to the various sites. We are asked to simply rely on her word that the conditions are sufficiently hazardous, just a few feet away from her preferred site, to warrant its elimination from consideration.

This may be a matter in which the BLNR seeks the advice of a Deputy Attorney General and the DLNR Civil Right Specialist in Executive Session.

The OCCL staff has the onerous duty of evaluating the appropriateness of a project based on a complete and comprehensive assessment that has been assembled from the acceptance of the application, to the writing of this staff report. In conclusion, staff believes that the project, as proposed, would not be consistent with Conservation District objectives.

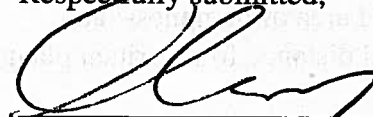
***Based on the above discussion and information received, Staff recommends as follows:***

**RECOMMENDATION:**

Staff recommends that the CDUA for the proposed *MDHE Single Family Residence, Access Road, 6-acre Forest Stewardship Area, Fencing, Drainage Improvements, and 26,000 sq. ft. "family farm"*, located in the Ko'olaupoko District, Island of Oahu, on *Tax Map Key: (1) 4-2-004:001*, be **Denied** by the Board of Land and Natural Resources, due to the following reason:

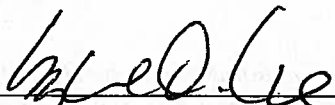
- Staff believes that a proposal to construct a 5,000 square foot single family residence and appurtenant uses near the Keolu Hills Ridgeline, cut and fill approximately 10,000 cubic yards of material to create a 1,070-foot long access road that also requires to (2) new drainage culverts long utility connections and trenching, a private fire hydrant, and the construction of retaining walls, does not aim to minimize the impacts to the Conservation District and is therefore not consistent with Conservation District Criteria 5 & 6, and the *Single Family Residential Standards* as outlined in Exhibit 4 of the Administrative Rules.

Respectfully submitted,



**Alex J. Roy, M.Sc., Staff Planner**  
*Office of Conservation and Coastal Lands*

Approved for submittal:



**Suzanne D. Case, Chairperson**  
*Board of Land and Natural Resources*





Location

1711 Kanapu'u Drive, Kailua O'ahu









EXHIBIT 3

CDUA:OA-3818



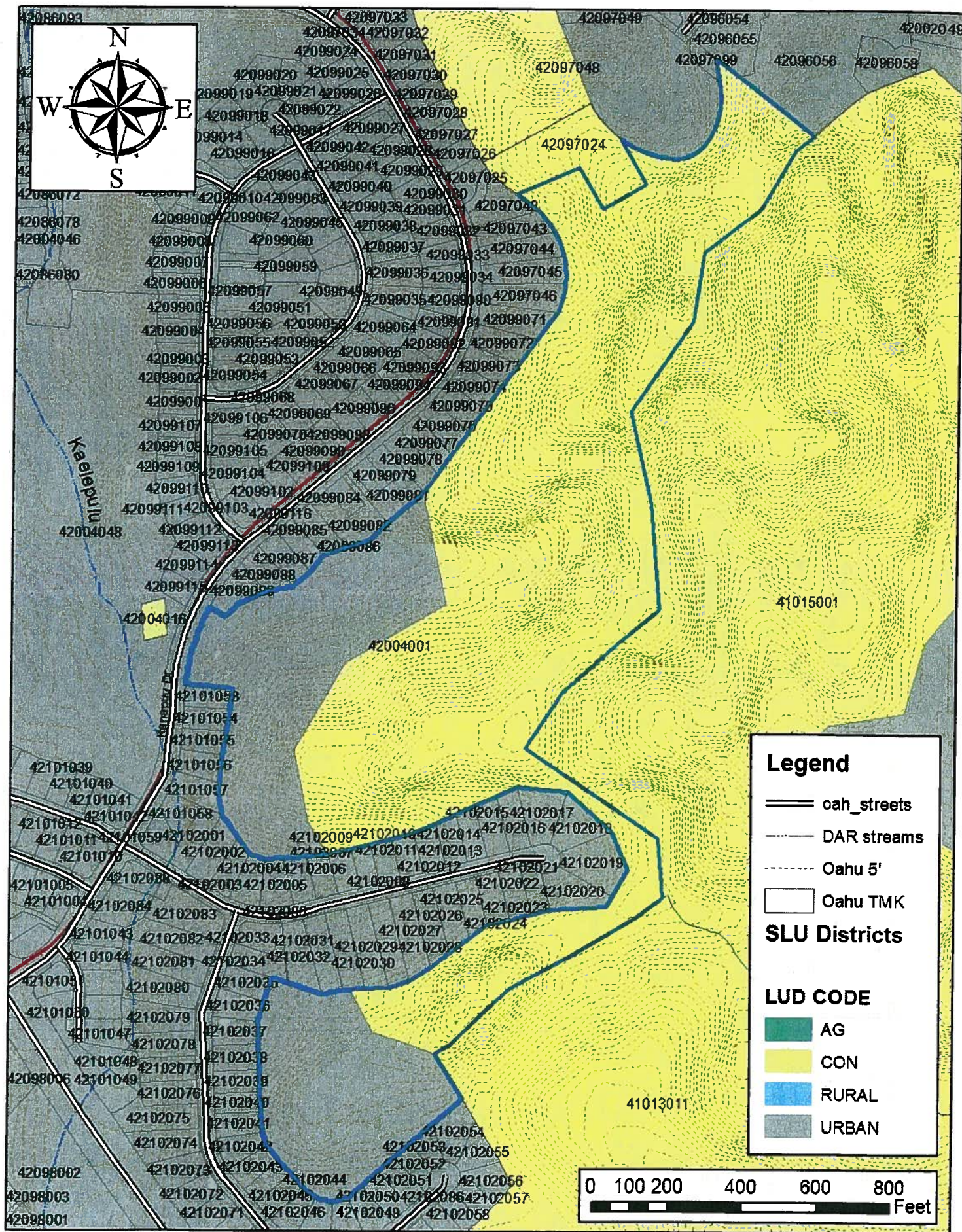


EXHIBIT 4

CDUA: OA-3818



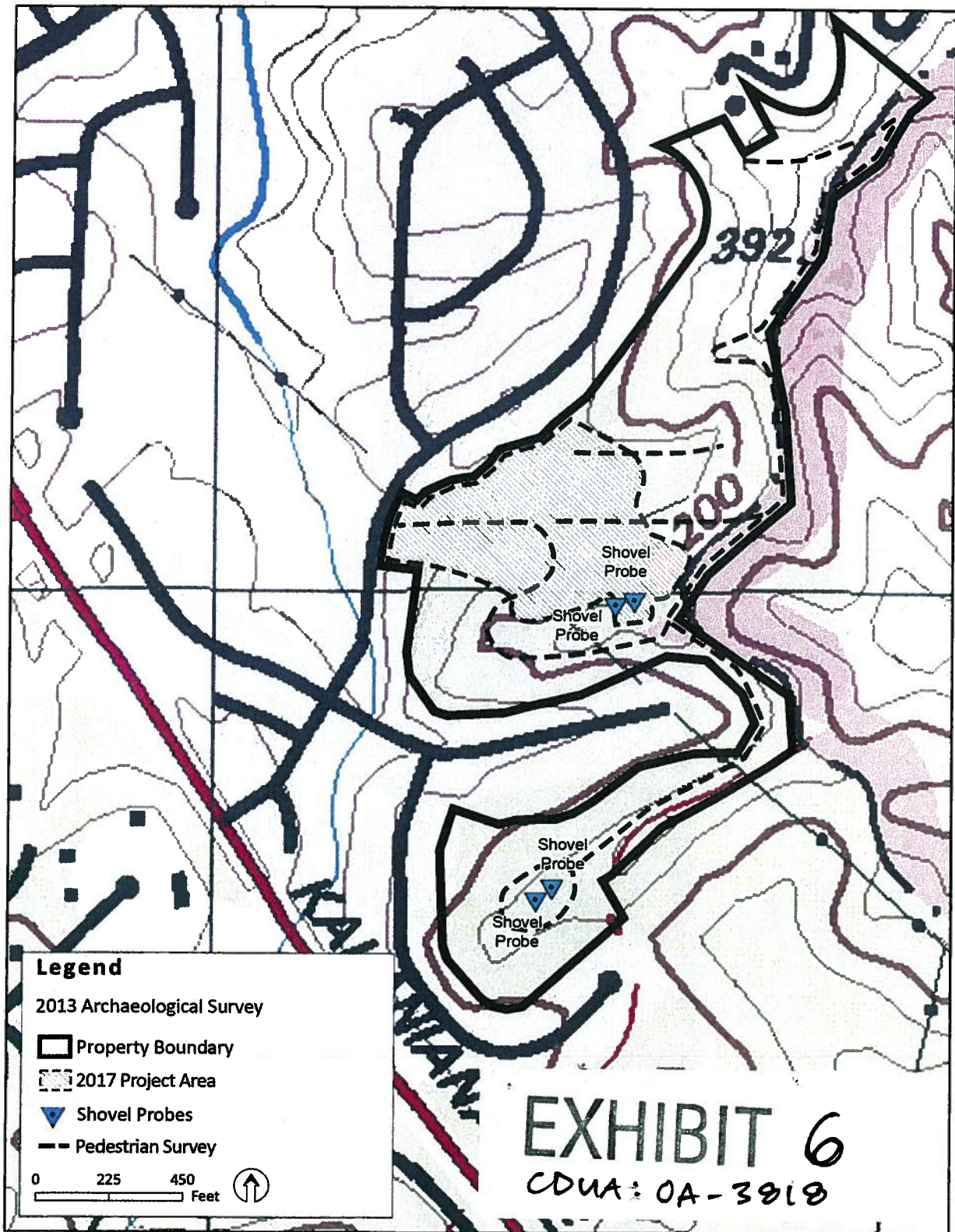


## EXHIBIT 5

CDUA: OA-3018



1711 KANAPU'U DRIVE  
RESIDENCE AND STEWARDSHIP



Archaeological Survey

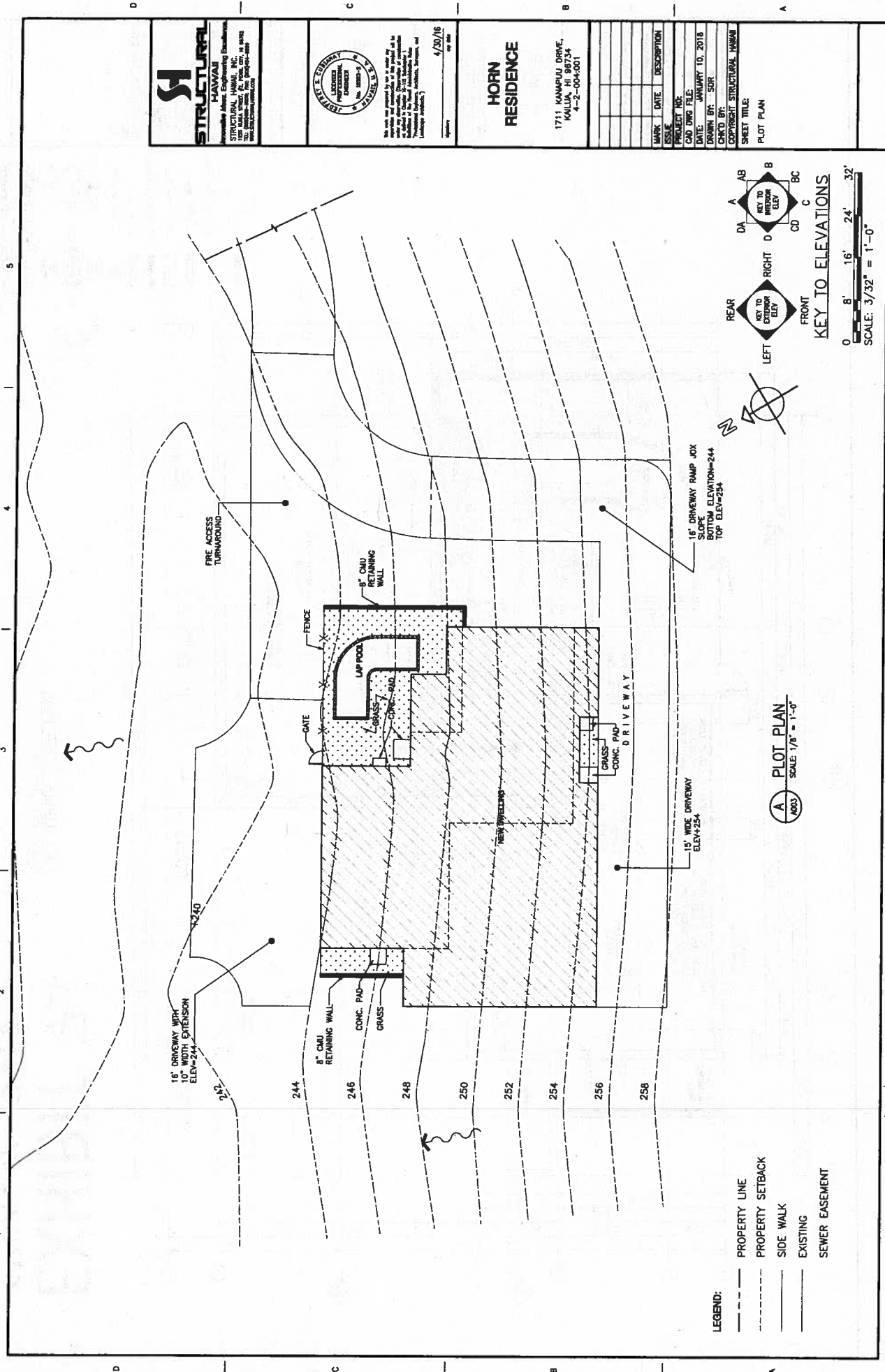


EXHIBIT 7 CDUA: 0A-3018

**STRUCTURAL HAWAII**  
 Structural Hawaii, Inc.  
 1711 KANAPU DRIVE, KAILUA, HI 96734  
 808-261-0001



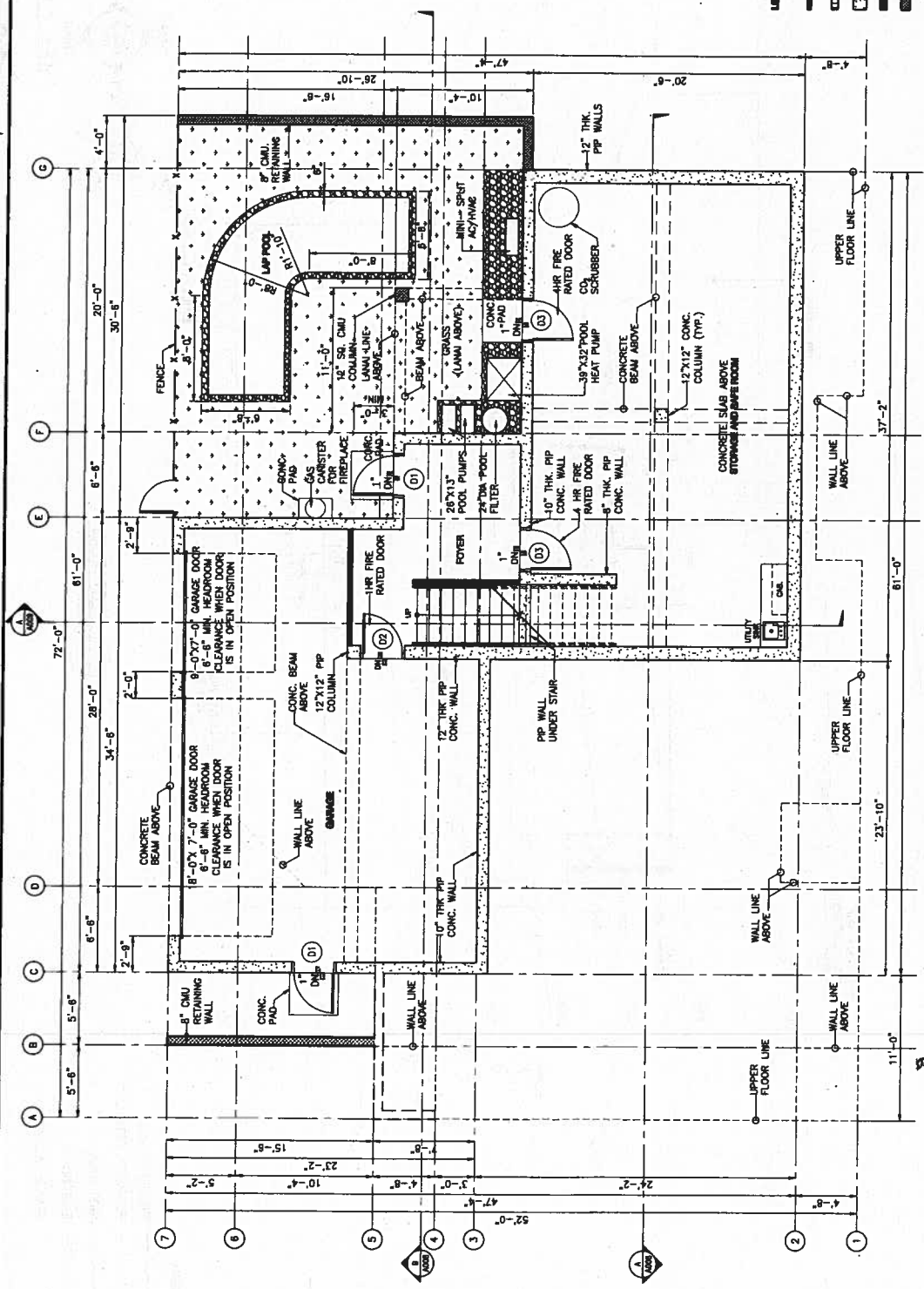
Not to be used for any project other than that for which it was prepared by the Engineer. This seal is the property of the Engineer and shall not be loaned, sold, or otherwise disposed of without the written consent of the Engineer. The Engineer shall not be held responsible for the actions of any other person or entity who uses this seal without the written consent of the Engineer.

**HORN RESIDENCE**

1711 KANAPU DRIVE,  
 KAILUA, HI 96734  
 4-2-004001

MARK	DATE	DESCRIPTION
ISSUE		
PROJECT NO.		
DATE		
DESIGNED BY		
CHECKED BY		
DATE		
PROJECT NO.		
PROJECT TITLE		

2 3 4 5



**KEY TO ELEVATIONS**

0 4' 8' 12'

SCALE: 1/4" = 1'-0"

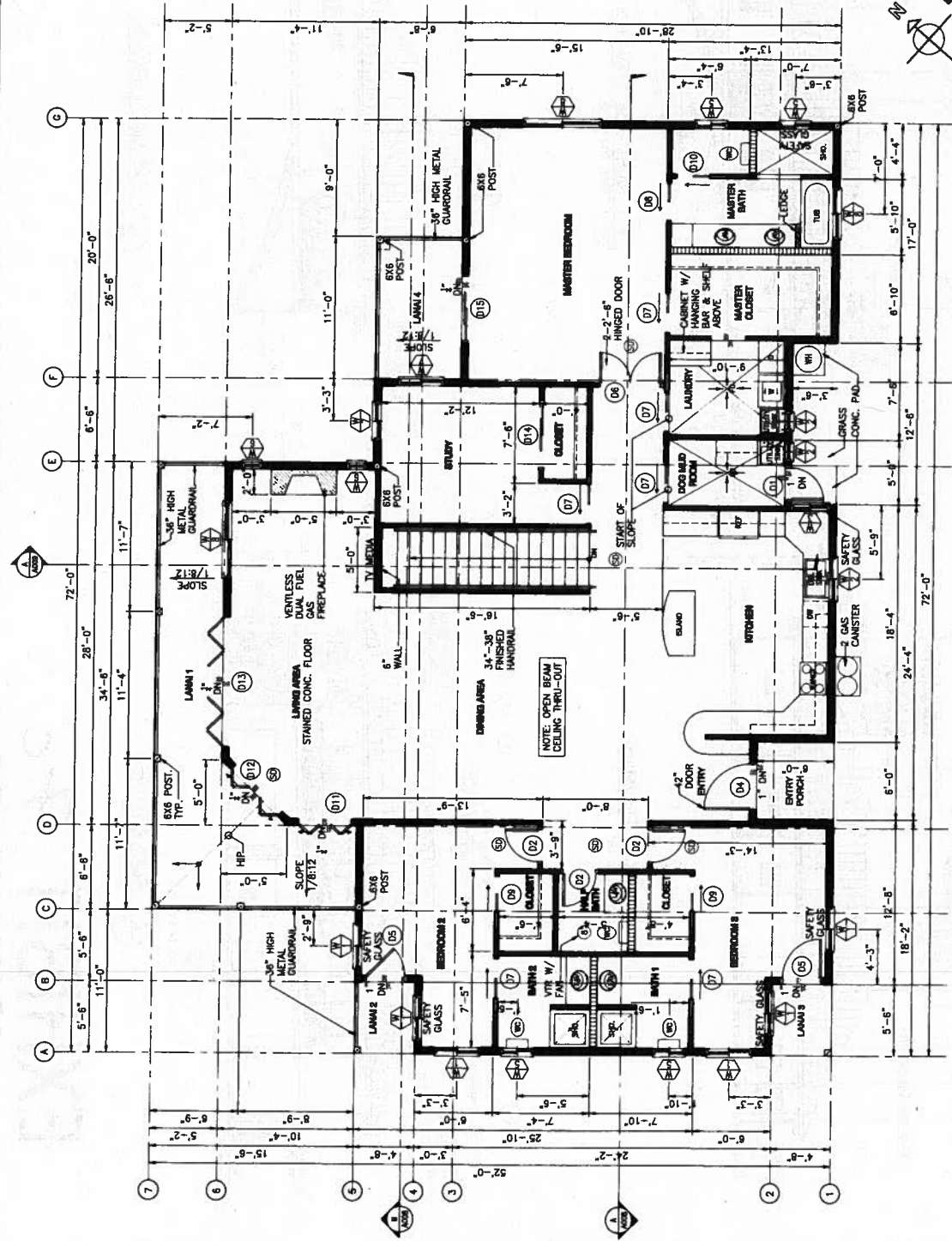
FRONT  
LEFT  
RIGHT  
REAR

**A LOWER FLOOR PLAN**  
 SCALE: 1/4" = 1'-0"

**EXHIBIT 7A**  
 CDUA: 0A-3818



2 3 4 5



A UPPER FLOOR PLAN  
SCALE: 1/4" = 1'-0"

**STRUCTURAL HAWAII**  
INCORPORATED  
1234 KALANANĀʻOHI DRIVE, SUITE 100  
HONOLULU, HAWAII 96813  
TEL: (808) 551-1234  
WWW.STRUCTURALHAWAII.COM



4/30/16  
DATE  
4/30/16  
DATE

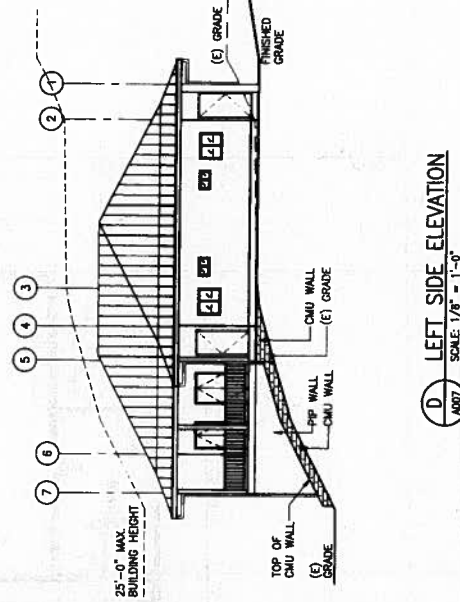
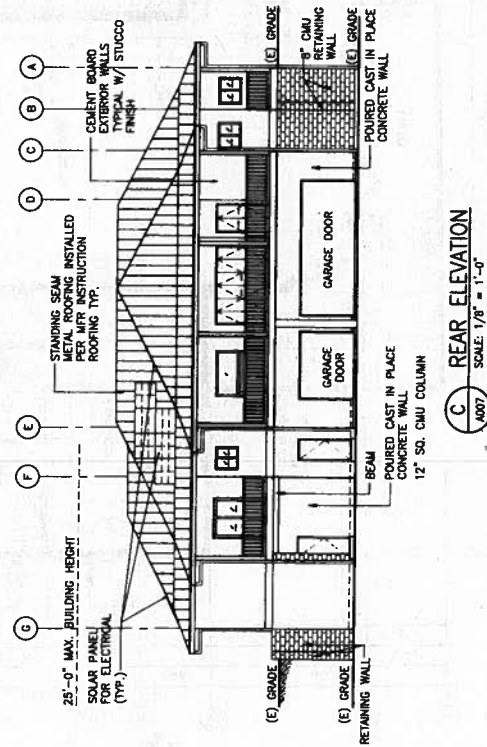
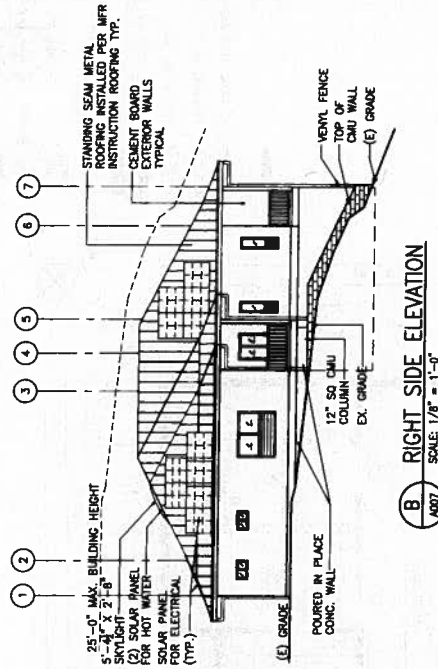
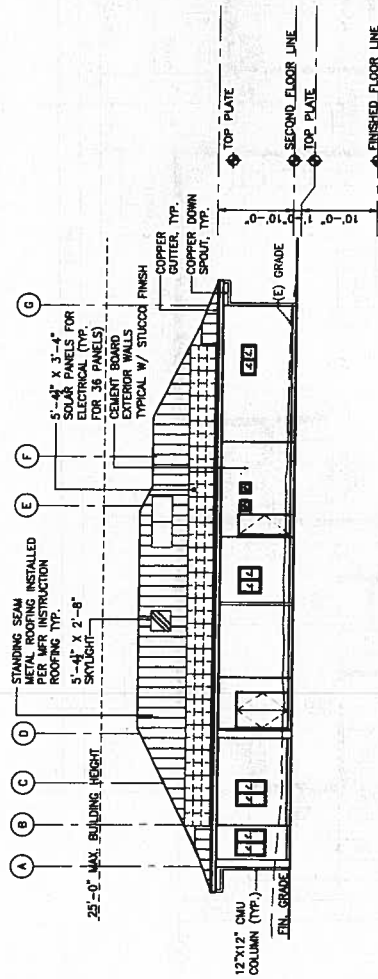
### HORN RESIDENCE

1711 KANAPALI DRIVE,  
KAILUA, HI 96734  
4-2-004301

MARK	DATE	DESCRIPTION
ISSUE		
PROJECT NO.		
CAD DWG FILE		
DATE	JANUARY 10, 2018	
DRAWN BY	SDR	
CHECKED BY		
SHEET TITLE		UPPER FLOOR PLAN

- 4" METAL STUD WALL
- PLUMBING WALL
- 10'/12" HP WALL
- 6" METAL STUD WALL
- 8" CMU WALL
- 12" CMU COLUMN
- UNDER
- REAR
- FRONT
- KEY TO ELEVATIONS
- 0 4' 8' 12'
- SCALE: 1/4" = 1'-0"

EXHIBIT 7B CDUA: OA-3018



MARK	DATE	DESCRIPTION
ISSUE		
PROJECT NO:		
DATE	DWG FILE:	
01/01/2018	JANUARY 10, 2018	
DRAWN BY:	SDR	
CHECK BY:		
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SHEET TITLE:		
EXTERIOR ELEVATIONS		

**HORN  
RESIDENCE**

1711 KANAPUJU DRIVE,  
KAULUA, HI 96734  
4-2-004:001

4/30/16

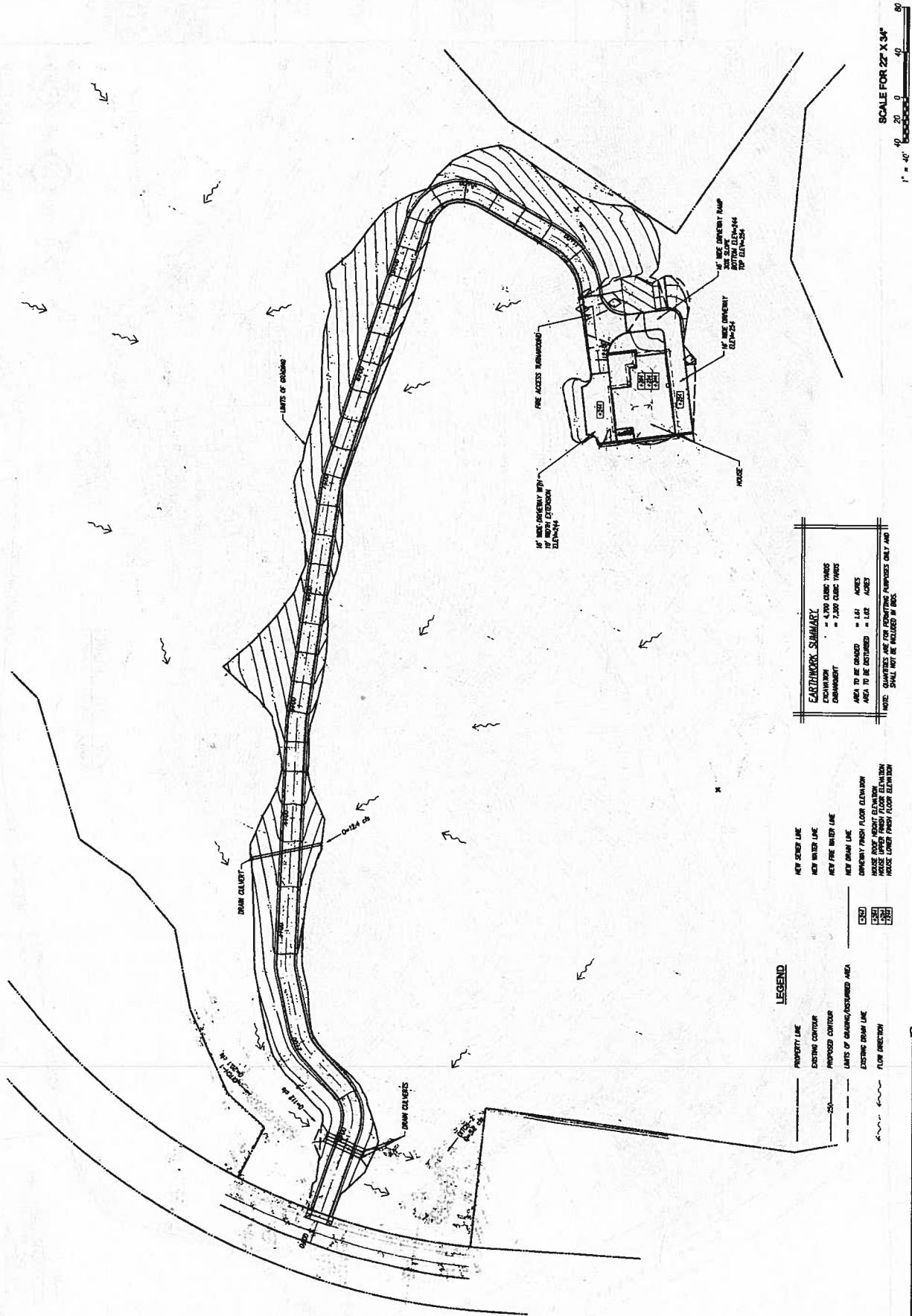


This note was prepared by me in order to separate and combine all the projects up to under my direction. (Observation of construction as defined in Chapter 10-113 Michigan) I believe it is the most appropriate form for the design of the project. Architects, Engineers, and Landscape Architects.

EXHIBIT 7c  
CDMA: 0A-3818

# CONCEPTUAL GRADING AND DRAINAGE PLAN

CAD DRAWING:	213037-01 GRADING PLAN.DWG
SCALE: 1" = 40'	
DATE: 5/13/2017	
PROJECT #: 213037-01	



SCALE FOR 22" X 34"

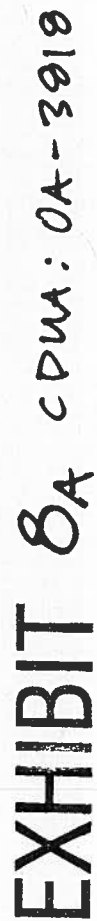
### EARTHWORK SUMMARY

EXTRACTION	= 4,700 CUBIC YARDS
EMBANKMENT	= 7,300 CUBIC YARDS
AREA TO BE GRADED	= 1.61 ACRES
AREA TO BE DISTURBED	= 1.02 ACRES

NOTE: QUANTITIES ARE FOR PERMITTING PURPOSES ONLY AND SHALL NOT BE INCLUDED IN BIDS.

### LEGEND

[illegible]



**SH**

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This work was prepared by me or under my supervision and contribution of this project, all in order my observations (Observations of construction as defined in Chapter 10-17) Schöppner.)

signature	4/30/16	exp date
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**HORN  
RESIDENCE**

711 KANAPUJU DRIVE,  
KAILUA, HI 96734  
4-2-004:001

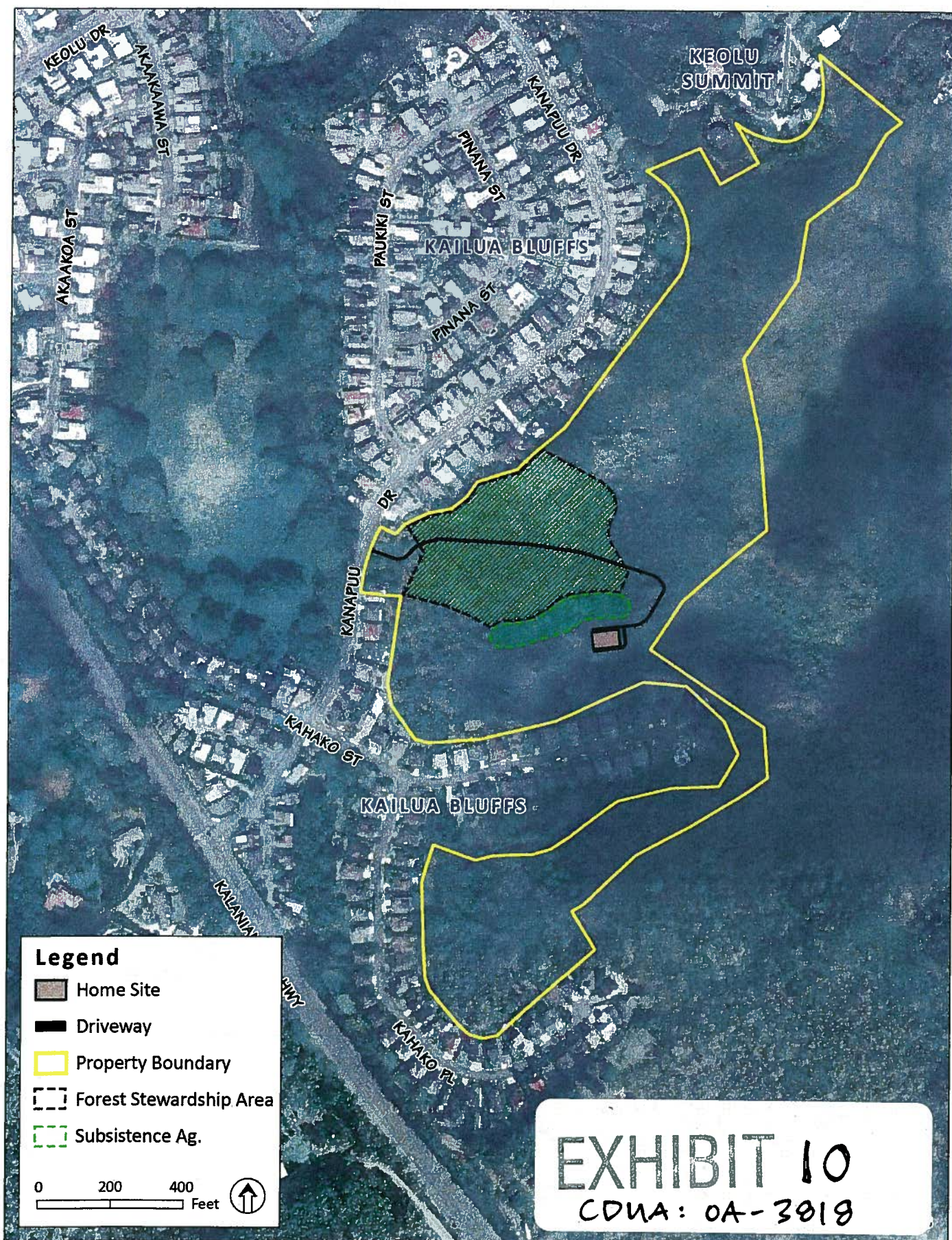
MARK	DATE	DESCRIPTION
MESSAGE		
PROJECT NO:		
CAD DWG FILE:		
DATE:	JANUARY 10, 2018	
DESIGNED BY:	SDR	
CHECKED BY:		
COPYRIGHT STRUCTURAL HANNAI		
SHEET TITLE:		
SITE PLAN		



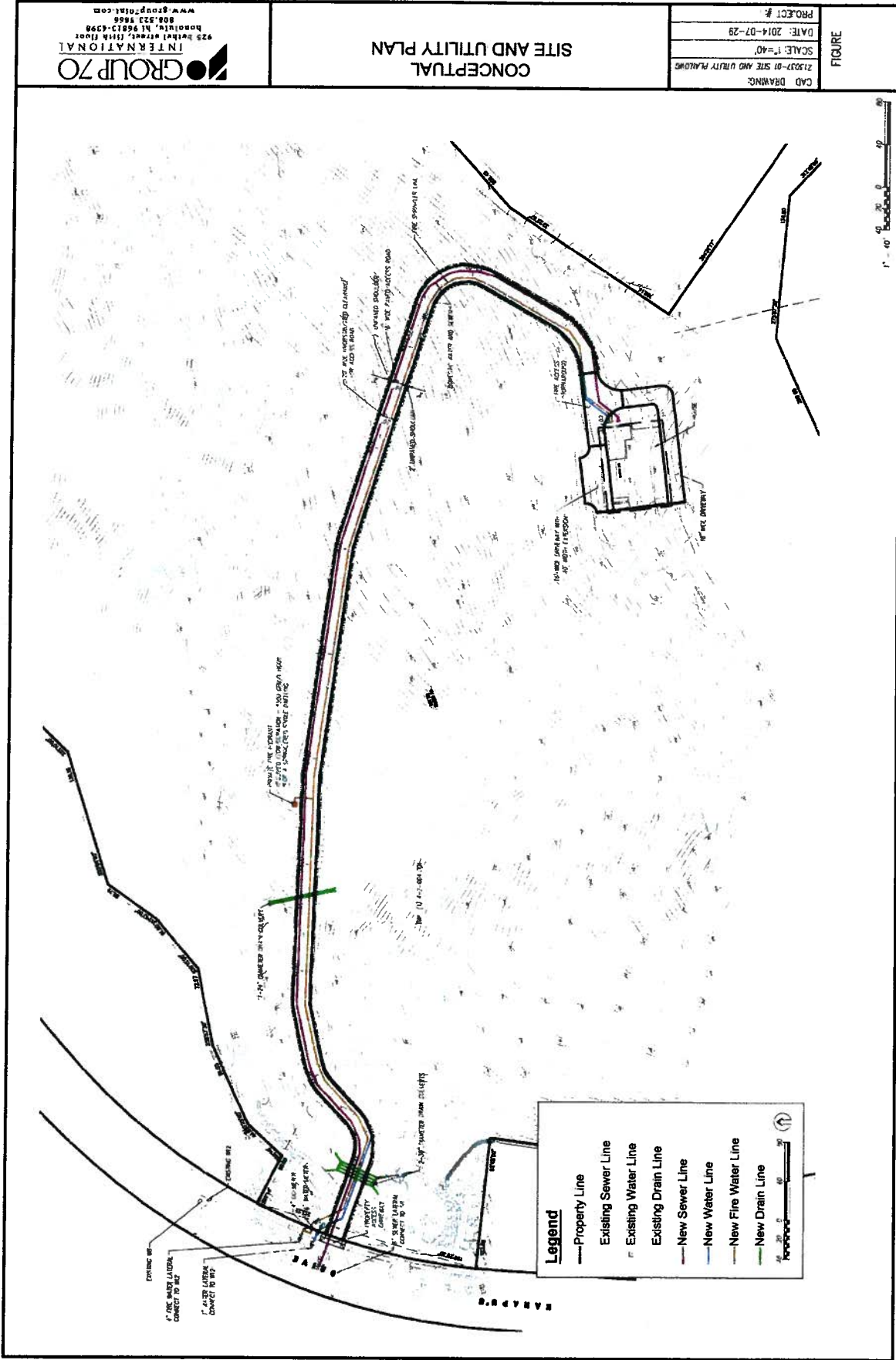


FSP site map. Hatching shows a rough layout of the natchwork establishment protocol

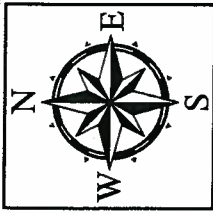









**EXHIBIT II**  
 CDWA: OA-3818



**Legend**

 Oahu TMK

# EXHIBIT 12

CDUA: OA-3818

TMK: (1) 4-2-004:001

Proposed Roadway

Approx. 220-ft. contour line

Approx. 240-ft. contour line

Site A  
ELEV. = 240+

Site O  
ELEV. = 220+

Kaelepulu

0 100 200 400 600 800 Feet

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community



