

**STATE OF HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
Honolulu, Hawai'i**

File No: OA-3827
180-Day Exp. Date: April 21, 2019

March 22, 2019

**Board of Land and
Natural Resources
State of Hawai'i
Honolulu, Hawai'i**

REGARDING: Conservation District Use Application (CDUA) OA-3827 for a Single Family Residence; After-The-Fact Gate and Solar Panels; and Associated Improvements

**APPLICANT/
LANDOWNER:** Darrel G. Welch, Jr.

LOCATION: Tantalus Heights, Honolulu, O'ahu

**TAX MAP KEYS
(TMKs):** (1) 2-5-014:028

AREA OF PARCEL: 1.003 acres

USE: 1.003 acres

SUBZONE: Resource

DESCRIPTION OF AREA/CURRENT USE

The project area is an undeveloped parcel of land located in the Resource Subzone of the State Land Use Conservation District at the end of Forest Ridge Way located in the Tantalus Heights area of Honolulu, O'ahu (see **Exhibit 1 & 2**). More specifically, the property is at an elevation of 1,500 feet, approximately five (5) miles up Round Top Drive from the City and County of Honolulu water pumping station at the end of Makiki Street. The property is located within an existing residential neighborhood and is bounded on the east side by another residential property; on the north and west side by the Honolulu Watershed Forest Reserve; and the south side abuts Forest Ridge Way, a public street.

According to the applicant, the property was extensively graded by the previous owner, who installed a driveway to access the adjacent parcel (TMK (1) 2-5-014:005). The concrete driveway enters the property at the southeast corner and follows the contour lines uphill to provide access to the building site and to the adjacent property which is owned by Mr. Bruce Hawkins. Mr. Hawkins has a permanent

easement allowing him use of the driveway on the subject parcel. To the applicant's knowledge, the parcel has never been developed otherwise.

The property is located on the southwestern flank of the Ko'olau mountain range. The onsite soil is classified as TAF, Tantalus silt loam, which is typically found on 70 percent slopes, volcanic spurs, and cinder cones in the uplands of O'ahu. Surface soils consist largely of reddish-brown plastic silt and clay, which represent the end stage of chemical weathering of cinders and volcanic ash. This soil is likely to overlay less weathered parent cinder and basalt rock. Normally, these types of silts and clays are plastic in nature, of variable expansive potential, and highly erodible.

According to the Federal Insurance Rate Map (FIRM), the property is classified as being in Flood Zone X, which is described as areas outside of the 100- and 500-year floodplains with minimal flooding. The project site is not within the tsunami evacuation zone.

Drainage from the site is conveyed from the site via surface sheet flow or percolation, which, according to the applicant, is excellent in the area and on this particular site due to observations that standing water has rarely been observed on the project site.

According to a biological survey prepared for the site by LeGrand Biological Surveys in September 2017, the property is dominated by an overgrown forest of invasive tree species with a weedy understory. A total of 46 plant species were documented with only one endemic species, koa (*Acacia koa*) present. No rare, endangered, or otherwise protected plant species located during the survey nor where there any federally delineated Critical Habitats identified on or adjacent to the project area.

The property and edges of access roads are dominated by a wet alien forest with trees such as Chinese banyan (*Ficus microcarpa*), koa, fiddlewood (*Citharexylum caudatum*), octopus tree (*Schefflera actinophylla*), gunpowder (*Trema orientalis*), kukui (*Aleurites moluccana*), mango (*Mangifera indica*), avocado (*Persea americanana*), and Christmas berry (*Schinus terebinthifolius*). The understory is dominated by introduced grasses such as Guinea Grass (*Panicum maximum*), palm grass (*Setaria palmifolia*), and California grass (*Brachiaria mutica*). Other scattered weeds throughout include wedelia (*Sphagneticola trilobata*), yellow ginger (*Hedychium flavescens*), Koster's curse (*Clidemia hirta*), downy jasmine (*Jasminum multiflorum*), and *Arthrostemum ciliatum*. The upper (eastern) portion of the property is dominated by thickets of black bamboo (*Phyllostachys nigra var. henionis*), with scattered trees of fiddlewood, gunpowder, koa, and Christmas berry. The understory is sparse under the bamboo, but along the outer edges of the thickets, plants such as downy jasmine, yellow ginger, and Koster's curse are abundant. Two aroids, taro vine (*Epipremnum pinnatum*) and monstera (*Monstera deliciosa*) are prevalent either as an understory or growing thickly as epiphytes in trees. Two fern species, laua'e haole (*Phlebodium aureum*) and common staghorn fern (*Platycerium bifurcatum*) were observed as epiphytes in several of the trees as well.

Obvious feral pig (*Sus scrofa*) signs, such as trails, rooting, and wallows were noted within the property. No other mammals were observed, but domestic dogs (*Canis f. Familiaris*) were noted in neighboring yards and it is highly likely that one or more rodent species use various resources found within the general project area. The endangered Hawaiian hoary bat is known to occur from sea level to upper elevations across a wide range of relatively undisturbed and highly modified habitats, and may roost in both native and introduced tree species in the project area.

Avian observations included only introduced species such as the red-billed Leiothrix (*Leiothrix lutea*), Japanese white-eye (*Zosterops japonicus*), Zebra dove (*Geopelia striata*), and red-whiskered bulbul

(Pycnonotus jacosus). No native avian species were observed during the survey in or around the property.

Regarding historic and traditional uses of the site, the applicant held discussions with Bishop Museum staff and communications published by Don Hibbard, former administrator of the State Historic Preservation Division (SHPD) which all indicated that this area has not undergone a comprehensive archaeological survey. The applicant further interviewed long-time Tantalus residents and the Tantalus Community Association historian, which all claimed no knowledge of traditional uses by native Hawaiians or archaeological remains in the area. The applicant also stated that he conducted a comprehensive visual survey which revealed no artifacts or other evidence of earlier use by native Hawaiians.

In regard to utility services, electricity, telephone, and cable service are available at the property line. There is no municipal water system or sewer system in the area. Solid waste is collected twice a week by the City and County of Honolulu, however, Tantalus does not have curbside recycling.

PREVIOUS ENFORCEMENT ACTION

In April 2018, OCCL opened an investigation into an unauthorized land use on Conservation lands. Based upon information provided in an earlier CDUP Application for the property, it was discovered that an automatic gate with two (2) solar panels may have been installed without the proper permits and/or approvals. Upon further investigation of the matter, the Department issued a Notice of Civil Resource Violation (ENF OA 19-05) on August 7, 2017 in which the landowner was fined \$250.00 for an unauthorized land use. Further the landowner was required to file for an After-the-Fact Site Plan Approval for the use. This current CDUA is meant to satisfy the requirement for the After-the-Fact SPA.

PROPOSED USE

The landowner is proposing to construct a 4,517 square foot, three story single family residence (SFR) which will be nestled into the contours of the site, so as to comply with the 25 foot height limit (**see Exhibit 3 to 8**). The first floor of the SFR will include two bedrooms, 2 bathrooms, a kitchen, dining room, living room, laundry, foyer, lanai, and two car garage that will also contain a utility room and several storage areas. The second floor will include a family room/guest room, and one bathroom. The third floor will include a small study with an exterior lanai. The structure of the SFR will consist of a wood frame on a concrete foundation. The garage floor system, which also supports the family room and third floor study will consist of a concrete slab on grade. The western portion of the home will be supported by a 60 foot long concrete block retaining wall and an additional 136 foot long retaining wall (varying from 2 to 8 feet in height) will enclose an exterior stair well and an upper level planter area.

Electric power to the SFR will be provided via 18-panel solar photovoltaic array, flush-mounted on the upper roof. It is anticipated that this system will provide a substantial portion of the home's electrical needs. The remaining electrical need will be fulfilled via an overhead electrical line that will connect to an existing utility pole on Forest Ridge Way. Telephone and cable service will also be provided via overhead lines from the same utility pole. To minimize the impact on the electrical grid, energy star appliances, carefully daylighting and shading design, extra insulation, and LED lighting will be utilized.

Regarding potable water, the entire roof of the SFR will be utilized for rainwater collection. Two galvanized steel holding tanks will store the water for domestic use. A 12,000 gallon tank will be located near the highest elevation of the property in order to provide household water pressure during power outages. Two 1.5 in diameter PVC pipes (approximately 120 linear feet) will connect this tank to the domestic water system and to a 3,000 gallon primary collection tank adjacent to the garage. This primary collection tank will also serve as a dedicated water supply for the SFR's fire sprinkler system.

The applicant is also proposing to install an individual wastewater system (septic). The system will include a 1,500 gallon underground septic tank, a 1,050 square foot underground infiltration cluster and a 6 foot diameter, 10 foot deep gravel-filled infiltration pit. The system will be located approximately 5 feet from the SFR and connected by a short section of ABS pipe.

Potable water will be provided by a well, using a water catchment system as a backup. The water catchment tank would have a capacity of 3,000 gallons. Hot water will be provided by an on-demand propane water heater, housed in an exterior cabinet along with a 10 gallon propane tank. Wastewater will be treated with a septic system designed in conformance with the requirements of the State Department of Health.

Additional improvements include a 1,200 square foot paved auto court which will provide parking for four vehicles and a 400 square foot grasscrete parking area to provide temporary parking for three additional vehicles. The auto court will be enclosed by a 3 foot high, 136 foot long retaining wall. Access to the site will continue to be supplied by an existing concrete driveway off of Forest Ridge Way.

The only significant grading on the project site will be in the immediate area of construction, and that area will be contoured only enough to direct surface water flow away from the house and to maintain landscaped area. An estimated 125 cubic yards of existing material will be relocated on site and none is anticipated to be exported. 25 to 30 cubic yards of fill material will be imported, primarily for base course to be used below concrete slabs and footings. As 90 percent of the impervious surfaces created by the project will be utilized to collect rainwater for household use, it is anticipated that there will be a minimal impact on stormwater drainage on the project site or in the immediate area.

Landscaping is also proposed which would be comprised of primarily native or naturalized species and will include 5,600 square feet of lawn (primarily Akiaki grass), 3,000 square feet of ground cover (primarily lauae fern and olena), and 1,400 square feet of flower beds that will contain blue ginger, pohua, anthurium, hibiscus, and ohia lehua (see Exhibit 9). The applicant is also requesting to remove albizia trees that are growing within the general area of the proposed construction area. No irrigation is anticipated to be necessary by the applicant due to the abundant rainfall in the area.

The applicant notes that one existing Koa tree and some existing non-native trees and shrubs will need to be removed to prepare the site for development. However, the Koa tree will be replaced with a new 10-gallon Koa seedling located in the northwestern corner of the property. Also, as the Hawaiian hoary bat may be present in the area, the applicant has stated that in accordance with current U.S. Fish and Wildlife Service guidance, pre-construction clearing of vegetation higher than 15 feet will not take place from June 1 to September 15 to avoid birthing and pup rearing season and all trees to be removed will be inspected for evidence of bat roosting regardless of season.

As mentioned earlier, this application is also meant as a means to remedy an earlier enforcement action (ENF OA 19-05) in which the landowner was found in violation for the installation of an automatic

gate with two solar panels and an associated battery pack at the entrance to the existing driveway. In conversation with the applicant, staff notes that the originally noted two (2) solar panels are actually three (3) solar panels and the applicant also wishes to apply for a temporary 24 square foot shed, approximately 4 feet high, which would support the existing three (3) photovoltaic panels and battery pack that will continue to power the electric driveway security gate until permanent electric service is installed. The applicant states that the shed will be removed once construction is complete and the gate power and controls will be routed to the house via underground conduits.

As mentioned earlier, the applicant could not find evidence of historic properties being present on the property nor the property being used for cultural activities. Staff notes that the applicant was required to submit a Hawai'i Revised Statutes (HRS) 6E form in which was submitted by Staff to SHPD, along with the Draft EA and CDUA. In response to the project submittal, SHPD responded that the proposed project is located along Tantalus-Round Top Drive which is listed in the Hawai'i and National registers of Historic Places. Tantalus-Round Top Drive is listed under Criteria A and C for its association with the Works Progress Administration and its distinctive engineering. A review of SHPD records indicates that several inadvertent discoveries of human burials have occurred during construction projects in the Upper Makiki Valley, Tantalus, and Round Top Drive areas. Additional properties identified in this part of the island include a historic carriage road, several features such as historic walls and enclosures, agricultural features, and rock shelters, and the historic Herring residence. The Withington Cottage and Harry P Hewitt Residence is also within the vicinity of the current project area. Staff notes that no properties were identified on the subject property itself. The letter further issued a "no historic properties affected" determination pursuant to HRS, Chapter 6E-42 and Hawai'i Administrative Rules (HAR) §13-284, and stated that "the permit issuance process may continue". However, the letter also requested the following provisions to the permit:

- No impacts to Tantalus-Round Top Drive will occur including removal or curbs, damage to pavement, and clearing of the shoulder area; and
- In the unlikely event that subsurface historic resources, including human skeletal remains, structural remains, cultural deposits, artifacts, sand deposits, or sink holes are identified during the demolition and/or construction work, cease work in the immediate vicinity of the find, protect the find from additional disturbance, and contact the State Historic Preservation Division at (808) 692-8015.

Both the Applicant and Staff notes that the project is limited to the property which is located on Forest Ridge Way and therefore no work is anticipated to affect Tantalus Round-Top Drive. The applicant wishes to also point out that there are no curbs on either Forest Ridge Way or Tantalus Round-Top Drive. However, as the project will use heavy machinery, the applicant has stated that any inadvertent damage to the road or shoulders will be repaired as a part of the construction process. In addition, the second provision will be included in the conditions of this permit and Staff notes that the applicant has also identified this as a mitigation measure in both the EA and CDUA documents.

Staff also notes that the applicant has also proposed a number of construction mitigation measures/best management practices that have been listed in **Exhibit 10**.

OTHER ALTERNATIVES CONSIDERED:

Alternative 1: No Action alternative. This alternative would preserve the status quo of the property which would remain an undeveloped lot. This alternative would not be viable as it would deprive the landowners of a reasonable use of their property.

Alternative 2: Alternative House Sites and Alternative Uses. Some other locations on the property could also serve as the site for a residence, but none have the advantages of the proposed site in terms of a reduced amount of cut and fill and taking advantages of natural sunlight and shading.

SUMMARY OF COMMENTS

The Office of Conservation and Coastal Lands referred the application, as well as the Draft Environmental Assessment (EA) to the following agencies and organizations for review and comment:

State Agencies:

DLNR, Division of Conservation and Resource Enforcement
DLNR, Division of Forestry and Wildlife
DLNR, Historic Preservation Division
DLNR, O'ahu District Land Office
DLNR, Engineering Division
Department of Health, Office of Environmental Quality Control
Office of Hawaiian Affairs

County Agencies:

City and County of Honolulu, Department of Planning & Permitting
City and County of Honolulu, Fire Department

Other Individuals/Organizations:

Makiki/Lower Punchbowl/Tantalus Neighborhood Board No. 10
Tantalus Community Association

In addition, this application was also sent to the nearest public library, the Hawai'i State Library, to make this information readily available to those who may wish to review it.

Comments were received by the following agencies and individuals and summarized by Staff as follows:

THE STATE

DEPARTMENT OF LAND AND NATURAL RESOURCES

Division of Conservation & Resource Enforcement: No Comments

Division of Forestry and Wildlife

Comments: The State and Federally listed Hawaiian hoary bat (*Lasiurus cinereus semotus*) has the potential to occur in the vicinity of the project area and may roost in trees. To avoid the potential for impacts to this tree-roosting species, site clearing should be timed to avoid disturbance during the bat birthing and pup rearing season (June 1 through September 15). If this cannot be avoided, woody

plants greater than 15 feet tall should not be disturbed, removed, or trimmed without determining if bats are using them.

We note that artificial lighting can adversely impact seabirds that may pass through the area at night causing disorientation which could result in collision with manmade artifacts or grounding of birds. For nighttime lighting that might be required, DOFAW recommends that any lights be fully shielded to minimize impacts. Nighttime work that requires outdoor lighting should be avoided during the seabird fledging season from September 15 to December 15 which is the period when young seabirds take their maiden voyage to the open sea.

DOFAW recommends using native plant species for landscaping that are appropriate for the area (i.e. climate conditions are suitable for the plants to thrive, historically occurred there, etc.). Please do not plant invasive species. DOFAW recommends consulting the Hawai'i weed risk assessment website to determine the potential invasiveness of plants proposed for use in the project.

You should avoid importing to O'ahu, soil or other plant material from off-island. Soil and plant material may have fungi (e.g. Rapid Ohia Death) and other pathogens that could harm our native species and ecosystems. Consider the recommendations in the Hawai'i Interagency Biosecurity Plan in planning, design, and construction.

Applicant's Response: With regard to the Hawaiian hoary bat, the limited site clearing is expected to place prior to June this year, thus avoiding the birth and pup rearing season. If, however, there is some delay outside of our control, the few trees that are to be removed will be inspected for the presence of the bat prior to their removal. As a note, most of the trees being removed are young, invasive *Albizia* trees that have invaded the open areas of the site in the past 2 years.

Since the new construction is an SFR, there would be no reason for general illumination of the grounds during the night. All the exterior lighting for the house at entries and walkways will be indirect fixtures that will be shielded from overhead views.

The landscape plans have been revised to remove any plants that are listed on the Hawai'i weed risk assessment website, as well as the Pacific Island Ecosystems at Risk website. Also, the landscape plan includes native and endemic plants that will thrive in the wet and elevated site.

As noted in the EA and CDUA, the only fill that is being brought to the site is engineered fill for footings and slabs that would be from an on-island source. No plant or soil material will be imported from neighbor islands, foreign, or mainland locations.

CITY & COUNTY OF HONOLULU

Department of Planning and Permitting Comments: The DPP does not have a record of the 1989 subdivision; however, the parcel was recognized by the City as a separate lot in 1990.

Staff notes that per Registered Map 1968 prepared by W.E. Wall dated 1899, Parcel 28 (Lot 16) and Parcel 5 (Lot 15) were considered separate lots of record.

Fire Department Comments: The Fire Department listed the following requirements –

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

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

Applicant's response: Per telephone conversation with Battalion Chief Wayne Masuda, I was informed that the requirements outlined in your letter would probably not be necessary if the home had a functional sprinkler system. Therefore, I am requesting that my fire sprinkler be considered as an alternative to the requirements listed.

HFD's response: The HFD reviewed the submitted information and approves your request for equivalency of the fire department access road requirements at 242 Forest Ridge Way provided that the following are complied with:

1. The proposed building shall meet all other fire code access and water supply requirements.
2. The proposed building shall be equipped with a fire sprinkler system that meets the requirements of National Fire Protection Association 13D.
3. Submit civil drawings to the HFD for review and approval.

ANALYSIS

Following review and acceptance for processing, the Applicant was notified, by correspondence dated October 24, 2018 that:

1. The proposed project is an identified land use within the Conservation District, pursuant to Hawai'i Administrative Rules (HAR) §13-5-24, *Identified land uses in the resource subzone, R-7 SINGLE FAMILY RESIDENCE (D-1) A single family residence that conforms to the design standards as outlined in this chapter* and §13-5-23, L-2 LANDSCAPING (D-1) *Landscaping (including clearing, grubbing, grading, and tree removal), including chemical and mechanical control methods, in accordance with state and federal laws and regulations, in an area of or more than 10,000 square feet. Any replanting shall be appropriate to the site location and shall give preference to plan materials that are endemic or indigenous to Hawai'i. The introduction of invasive plant species is prohibited.* The proposed uses require a Board Permit.
2. Pursuant to HAR §13-5-40 HEARINGS, a Public Hearing will not be required.
3. In conformance with Chapter 343, Hawai'i Revised Statutes (HRS), as amended, and HAR, Title 11, Department of Health, Chapter 200, Environmental Impact Statement Rules, an Environmental

Assessment (EA) for the project has been prepared and a Finding of No Significant Impacts (FONSI) is anticipated for the proposed project;

4. The proposed project is not within the Special Management Area.

The Final EA/Finding of No Significant Impact (FONSI) was issued by the DLNR Chairperson and published in the February 23, 2019 edition of the Office of Environmental Quality Control's *The Environmental Notice*.

CONSERVATION CRITERIA

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

- 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 and cultural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare.

The proposed use is an identified land use in the Resource subzone of the Conservation District; as such, it is subject to the regulatory process established in Chapter 183C, HRS and detailed further in Chapter 13-5, HAR.

No rare, threatened or endangered plant or animal species or significant habitats are known to exist on the subject property. Only one endemic tree species was present, koa. All koa trees are anticipated to be retained as landscaping except one which needs to be removed for site preparation. However, the tree will be replaced with a new 10-gallon koa tree in the northwest corner of the property. While the Hawaiian hoary bat was not present at the site, it has the potential to occur in the vicinity of the project area and may roost in trees. To avoid the potential for impacts to this tree-roosting species, site clearing will be timed to avoid disturbance during the bat birthing and pup rearing season (June 1 through September 15). If this cannot be avoided, the trees proposed to be removed will be inspected for the presence of the bat prior to their removal. In addition, any and all exterior lighting will be shielded downwards to minimize the potential for disorientation to seabirds.

No archaeological and cultural resources have been identified on the property. In addition, SHPD has issued a "no historic properties affected" determination for the project pursuant to HRS Chapter 6E-42 and HAR §13-284.

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

The objective of the Resource subzone is to ensure, with proper management, the sustainable use of the natural resources of those areas. The proposed land uses are identified land uses that can be applied for pursuant to §13-5-22 and §13-5-23, HAR. The proposed SFR shall be built to comply with all Federal, State and County regulations and shall be constructed in accordance with Chapter 13-5, Exhibit 4 Single Family Residential Standards.

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

The project area outside of the Special Management Area (SMA). However, the proposed land use complies with following Coastal Zone Management guidelines as follows:

- (1) *Recreational Resources:* The property is located at an elevation of 1,500 feet, with the closest recreational facility being the Honolulu Watershed Forest Reserve that is located along the north and west side of the property. However, the project is limited to the subject parcel and will not affect the forest reserve itself nor access to the forest reserve.
 - (2) *Historic Resources:* No archaeological and cultural resources have been identified on the property. As mentioned earlier, the applicant was required to submit a HRS 6E form for SHPD's review in which SHPD issued a "no historic properties affected" determination.
 - (3) *Scenic and Open Space Resources:* The proposed SFR will be nested into the existing contours of the property and finished with materials and colors that blend in with the existing vegetation. The home will be screened by the property's abundant vegetation and will be partially only visible only from several existing homes in the area and a few locations on Tantalus Drive, Makiki Valley Trail, and Puu Ohia Trail. In addition, the SFR is located in an already existing developed residential area and is therefore, in line with the character of the existing area.
 - (4) *Coastal Ecosystems, (9) Beach Protection, & (10) Marine Resources:* While the proposed project is located over 3 miles from the nearest coastal area, the proposed project will use BMPs during construction to minimize site runoff into local streams. The applicant notes that 60% of the property will be undisturbed and that after project completion, 90% of the impervious surfaces created on site will be utilized to collect rainwater for household use and, therefore, impacts to coastal areas are not anticipated.
 - (7) *Managing Development & (8) Public Participation:* As a part of this permit process, the State and County agencies, as well as the public was notified of this application and was given the opportunity to comment.
- 4) *The proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region.*

Staff believes the proposed land use will not cause substantial adverse impacts to existing natural resources within the surrounding area, community or region provided that mitigative measures are implemented and the applicant shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard that the project may cause Short-term impacts associated with construction activities such as potential storm water runoff and noise and air quality impacts are anticipated, however, BMPs shall be implemented to mitigate any potential impacts.

No rare, threatened or endangered plant or animal species or significant habitats are known to exist on the subject property. Only one endemic tree species was present, koa. All koa trees are anticipated to be retained as landscaping except one which needs to be removed for site

preparation. However, the tree will be replaced with a new 10-gallon koa tree in the northwest corner of the property.

While the Hawaiian hoary bat was not present at the site, it has the potential to occur in the vicinity of the project area and may roost in trees. To avoid the potential for impacts to this tree-roosting species, site clearing will be timed to avoid disturbance during the bat birthing and pup rearing season (June 1 through September 15). If this cannot be avoided, the trees proposed to be removed will be inspected for the presence of the bat prior to their removal. In addition, any and all exterior lighting will be shielded downwards to minimize the potential for disorientation to seabirds.

No archaeological and cultural resources have been identified on the property. In addition, SHPD has issued a "no historic properties affected" determination for the project pursuant to HRS Chapter 6E-42 and HAR §13-284.

- 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.*

Staff is of the opinion that the proposed project will be compatible with the locality and surrounding areas and is appropriate to the physical conditions and capability of the specified parcel.

- 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.*

As stated previously, the proposed SFR will be nested into the existing contours of the property and finished with materials and colors that blend in with the existing vegetation. The home will be screened by the property's abundant vegetation and will be partially only visible only from several existing homes in the area and a few locations on Tantalus Drive, Makiki Valley Trail, and Puu Ohia Trail. In addition, the SFR is located in an already existing developed residential area and is therefore, in line with the character of the existing area.

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

No subdivision of land is proposed.

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

Staff believes the proposed land use will not be materially detrimental to the public health, safety and welfare as mitigated. With the incorporation of an appropriately designed and operated individual wastewater system, combined with other BMPs identified, the proposed residential land use will not result in materially detrimental impacts to public health, safety and welfare.

CULTURAL IMPACT ANALYSIS:

As discussed earlier, the applicant held discussions with Bishop Museum staff and communications published by Don Hibbard, former administrator of SHPD which all indicated that this area has not undergone a comprehensive archaeological survey. The applicant further interviewed long-time Tantalus residents and the Tantalus Community Association historian, which all claimed no knowledge of traditional uses by native Hawaiians or archaeological remains in the area. The applicant also stated that he conducted a comprehensive visual survey which revealed no artifacts or other evidence of earlier use by native Hawaiians. In addition, the applicant was required to submit a Hawai'i Revised Statutes (HRS) 6E form in which was submitted by Staff to SHPD, along with the Draft EA and CDUA. In response to the project submittal, SHPD responded that the proposed project is located along Tantalus-Round Top Drive which is listed in the Hawai'i and National registers of Historic Places. Tantalus-Round Top Drive is listed under Criteria A and C for its association with the Works Progress Administration and its distinctive engineering. Staff notes that the project is located along Forest Ridge Way, not Tantalus-Round Top Drive. A review of SHPD records indicates that several inadvertent discoveries of human burials have occurred during construction projects in the Upper Makiki Valley, Tantalus, and Round Top Drive areas. Additional properties identified in this part of the island include a historic carriage road, several features such as historic walls and enclosures, agricultural features, and rock shelters, and the historic Herring residence. The Withington Cottage and Harry P Hewitt Residence is also within the vicinity of the current project area. Staff notes that no properties were identified on the subject property itself. The letter further issued a "no historic properties affected" determination pursuant to HRS, Chapter 6E-42 and Hawai'i Administrative Rules (HAR) §13-284,

Staff notes that the Office of Hawaiian Affairs did not provide any comments nor were any comments received from the general public regarding native and/or traditional uses that may be infringed upon. 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.

Staff believes valued cultural, historical or natural resources customarily or traditionally used by native Hawaiian's will not be adversely affected within the Conservation District should this land use be approved. The project will be conditioned that if cultural or archaeological resources are discovered, all work will cease and the Historic Preservation Division will be notified.

DISCUSSION

Staff notes that the proposed SFR and various improvements are located on a property in an existing developed residential neighborhood. The neighboring properties all have SFRs, most of which are either non-conforming or were approved by the Board in the later half of the 1960s, right after the advent of the conservation district.

According to Staff's research, parcel 28 and the adjacent parcel 5 were owned by Mr. and Mrs. Kendall Hawkins. In 1965, the Hawkins applied to construct three additional, two bedroom SFRs on Parcel 28 in addition to their existing, nonconforming SFR on parcel 5. At that time, the Hawkins were advised that their request fell under the non-conforming provisions of what was then called the State Conservation District Regulations (Regulation No. 4) and in effect, gave approval for the construction of the additional SFRs. This may explain why the property was previously graded and that the intent to develop the project area like the rest of the neighborhood was already in place back in the late 1960s.

Staff does note, however, in 1969, the Hawkins applied for an additional six (6) residences, but the application was disapproved on the basis that the requested use could not meet the conditions and compliance requirements of Regulation No. 4 and this may ultimately explain why the parcel has remained undeveloped until now.

During construction of the, BMPs will be observed and implemented. Within the EA and the CDUA, the applicant has identified a number of mitigative measures, conditions, and practices to ensure that the proposal will have minimal effect on the natural resources that may be impacted by the proposed project. As such, these proposed measures, conditions and practices are incorporated into the permit. In addition, the proposed SFR is consistent with Chapter 13-5, Hawaii Administrative Rules, Exhibit 4, Single Family Residential Standards.

RECOMMENDATION

That the Board of Land and Natural Resources APPROVE Conservation District Use Application OA-3827 for an SFR and associated improvements and for the After-The-Fact gate and solar panels, located at 242 Forest Ridge Way, Tantalus Heights, Honolulu, island of O'ahu, TMK (1) 2-5-014:028, subject to the following conditions:

1. The permittee shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments, and applicable parts of this chapter;
2. The permittee, its successors and assigns, shall indemnify and hold the State of Hawai'i harmless from and against any loss, liability, claim, or demand for property damage, personal injury, and death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit;
3. The permittee shall comply with all applicable department of health administrative rules;
4. The single family residence shall not be used for rental or any other commercial purposes unless approved by the board. Transient rentals are prohibited, with the exception of wilderness camps approved by the board;
5. The permittee shall provide documentation (e.g., book and page or document number) that the permit approval has been placed in recordable form as a part of the deed instrument, prior to submission for approval of subsequent construction plans;
6. Before proceeding with any work authorized by the department or the board, the permittee shall submit four copies of the construction plans and specifications to the chairperson or an authorized representative for approval for consistency with the conditions of the permit and the declarations set forth in the permit application. Three of the copies will be returned to the permittee. Plan approval by the chairperson does not constitute approval required from other agencies;
7. Unless otherwise authorized, any work or construction to be done on the land shall be initiated within one year of the approval of such use, in accordance with construction plans that have been signed by the chairperson, and shall be completed within three years of the

- approval of such use. The permittee shall notify the department in writing when construction activity is initiated and when it is completed;
8. All representations relative to mitigation set forth in the accepted application and environmental assessment or impact statement for the proposed use are incorporated as conditions of the permit;
 9. The permittee shall plan to minimize the amount of dust generating materials and activities. Material transfer points and on-site vehicular traffic routes shall be centralized. Dusty equipment shall be located in areas of least impact. Dust control measures shall be provided during weekends, after hours and prior to daily start-up of project activities. Dust from debris being hauled away from the project site shall be controlled. Landscaping and dust control of cleared areas will be initiated promptly;
 10. The permittee shall notify the Office of Conservation and Coastal Lands (OCCL) in writing prior to the initiation and upon completion of the project;
 11. **No impact to Tantalus-Round Top Drive will occur including removal of curbs, damage to pavement, and clearing of shoulder area. Any inadvertent damage to the road or shoulders will be repaired as needed;**
 12. **In the unlikely event that subsurface historic resources, including human skeletal remains, structural remains, cultural deposits, artifacts, sand deposits, or sink holes are identified during the demolition and/or construction work, cease work in the immediate vicinity of the find, protect the find from additional disturbance, and contact the State Historic Preservation Division at (808) 692-8015.**
 13. The permittee shall utilize Best Management Practices for the proposed project;
 14. During construction, appropriate mitigation measures shall be implemented to minimize impacts to the aquatic environment, off-site roadways, utilities, and public facilities;
 15. The single-family residence shall conform to the single-family residential standards included as Exhibit 4 of the Hawaii Administrative Rules, Chapter 13-5;
 16. The permittee understands and agrees that the permit does not convey any vested right(s) or exclusive privilege;
 17. In issuing the permit, the department and board have relied on the information and data that the permittee has provided in connection with the permit application. If, subsequent to the issuance of the permit such information and data prove to be false, incomplete, or inaccurate, this permit may be modified, suspended, or revoked, in whole or in part, and the department may, in addition, institute appropriate legal proceedings;
 18. When provided or required, potable water supply and sanitation facilities shall have the approval of the department of health and the county department of water supply;

19. Where any interference, nuisance, or harm may be caused, or hazard established by the use, the permittee shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard;
20. Obstruction of public roads, trails, and pathways shall be avoided or minimized. If obstruction is unavoidable, the permittee shall provide alternative roads, trails, or pathways acceptable to the department;
21. During construction, appropriate mitigation measures shall be implemented to minimize impacts to off-site roadways, utilities, and public facilities;
22. The permittee shall obtain a county building or grading permit or both for the use prior to final construction plan approval by the department;
- 23. All exterior lighting shall be shielded to protect the night sky and minimize impacts to seabirds;**
24. The permittee acknowledges that the approved work shall not hamper, impede, or otherwise limit the exercise of traditional, customary, or religious practices of native Hawaiians in the immediate area, to the extent the practices are provided for by the Constitution of the State of Hawaii, and by Hawaii statutory and case law;
25. Any landscaping will shall be appropriate to the site location and shall give preference to plant materials that are endemic or indigenous to Hawai'i. The introduction of invasive plant species is prohibited;
- 26. Trees taller than 15 feet shall not be removed or trimmed during the Hawaiian Hoary bat birthing and pup rearing season from June 1st to September 15th. If this cannot be avoided, woody plants greater than 15 feet should not be disturbed, removed, or trimmed without determining if bats are present;**
27. Other terms and conditions as may be prescribed by the Chairperson; and
28. Failure to comply with any of these conditions shall render this Conservation District Use Permit void under Chapter 13-5, as determined by the chairperson or board.

Respectfully submitted,



Lauren Yasaka, Staff Planner
Office of Conservation and Coastal Lands


Approved for submittal:




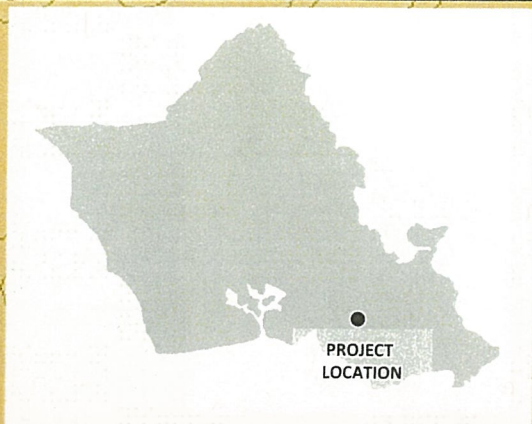
SUZANNE D. CASE., Chairperson
Board of Land and Natural Resources

LEGEND

Conservation District Subzone:

 Resource Subzone

 Project Area Boundary



Honolulu Watershed Forest Reserve

Project Site
Tax Map Key: (1) 2-5-014:028

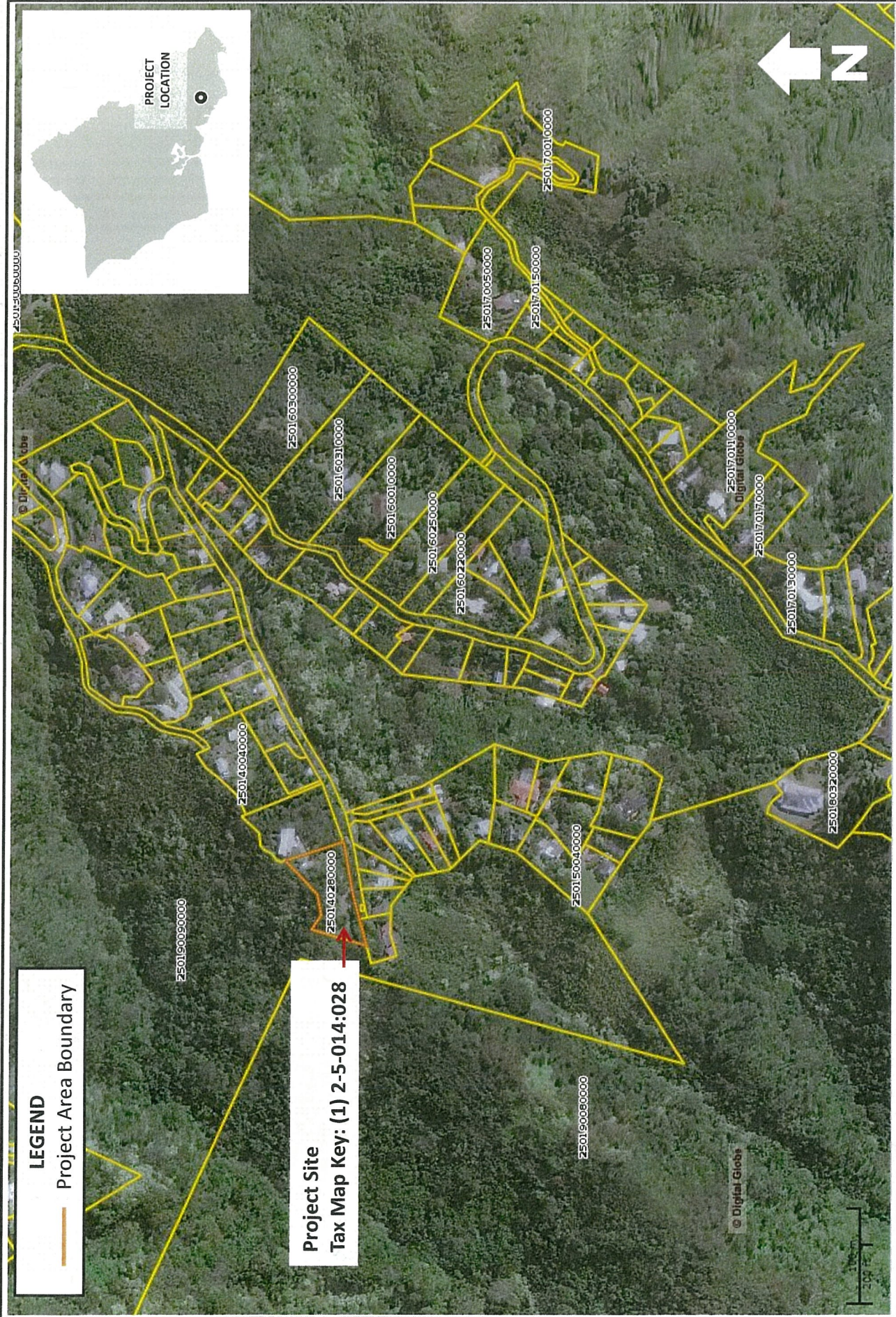


Forest Ridge Way

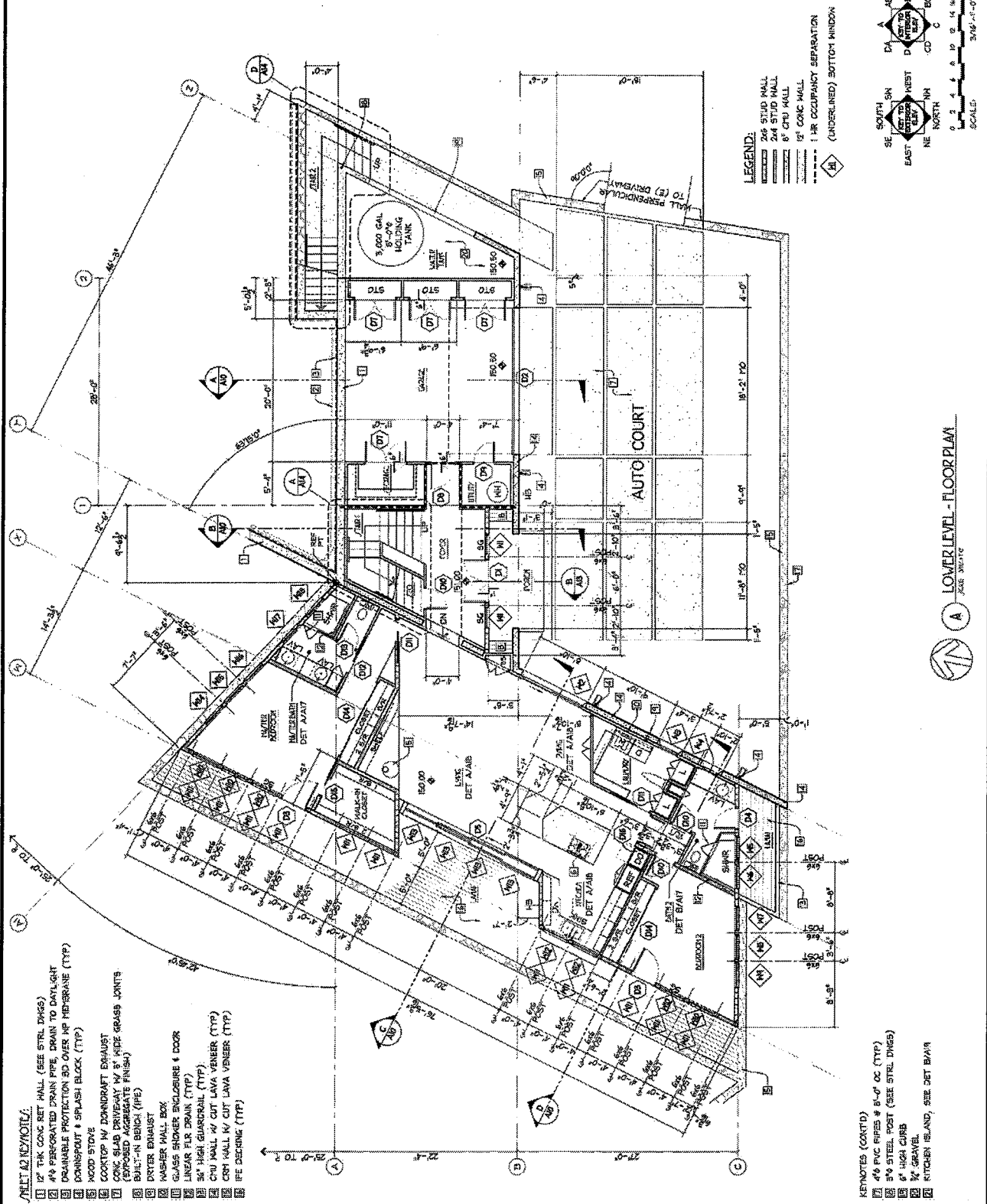
Round Top Place

Round Top Drive





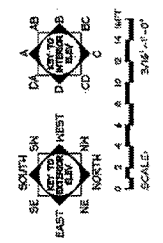
LOCATION MAP



- SHEET A2 (REVISED):**
- 1 12" THK CONG RET MALL (SEE STRL DIMS)
 - 2 4" PERFORATED DRAIN PIPE, DRAIN TO DAYLIGHT
 - 3 DEBRIS PROTECTION 30" OVER HP MEMBRANE (TYP)
 - 4 DOWNSPOUT & SPLASH BLOCK (TYP)
 - 5 WOOD STOVE
 - 6 COOKTOP W/ DOWNDRAFT EXHAUST
 - 7 CONG SLAB DRIVEWAY W/ 8" WIDE BRASS JOINTS (EXPOSED AGGREGATE FINISH)
 - 8 BUILT-IN BENCH (IFE)
 - 9 DRYER EXHAUST
 - 10 WASHER WALL BOX
 - 11 GLASS SHOWER ENCLOSURE & DOOR
 - 12 LINEAR FLD DRAIN (TYP)
 - 13 36" HIGH GUARDRAIL (TYP)
 - 14 CRU MALL W/ CUT LAVA VENEER (TYP)
 - 15 CRU MALL W/ CUT LAVA VENEER (TYP)
 - 16 IFE DECKING (TYP)

- KEYNOTES (CONT'D)**
- 17 4" PVC PIPES @ 8'-0" OC (TYP)
 - 18 3" X 3" STEEL POST (SEE STRL DIMS)
 - 19 6" HIGH CURB
 - 20 3/4" GRAVEL
 - 21 KITCHEN ISLAND, SEE DET B/A/9

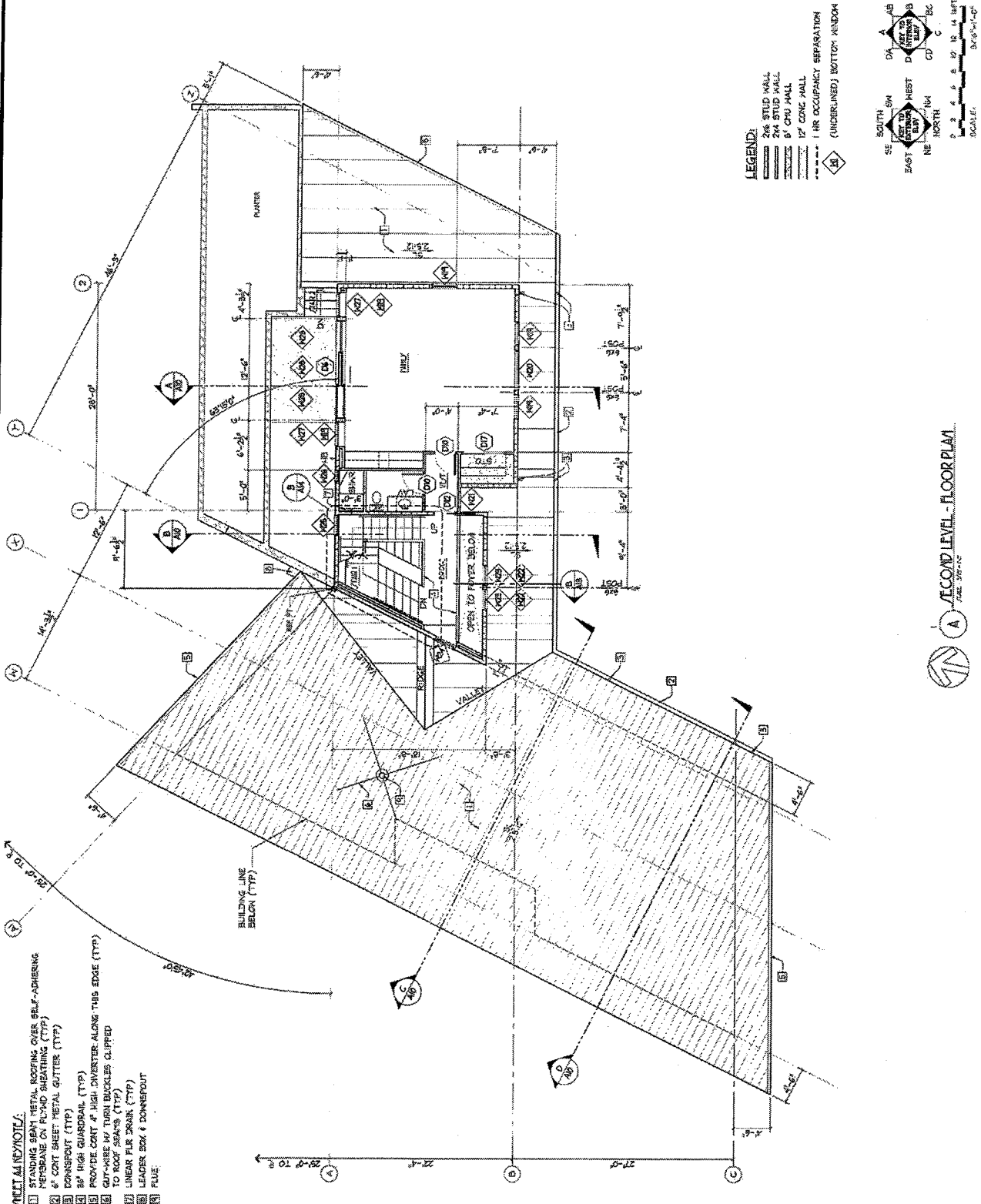
- LEGEND:**
- 2x6 STD MALL
 - 2x4 STD MALL
 - 8" CRU MALL
 - 12" CONG MALL
 - 1 HR OCCUPANCY SEPARATION
 - (UNDERLINED) BOTTOM HIDDEN
 - (A)



LOWER LEVEL - FLOOR PLAN
AS SHOWN

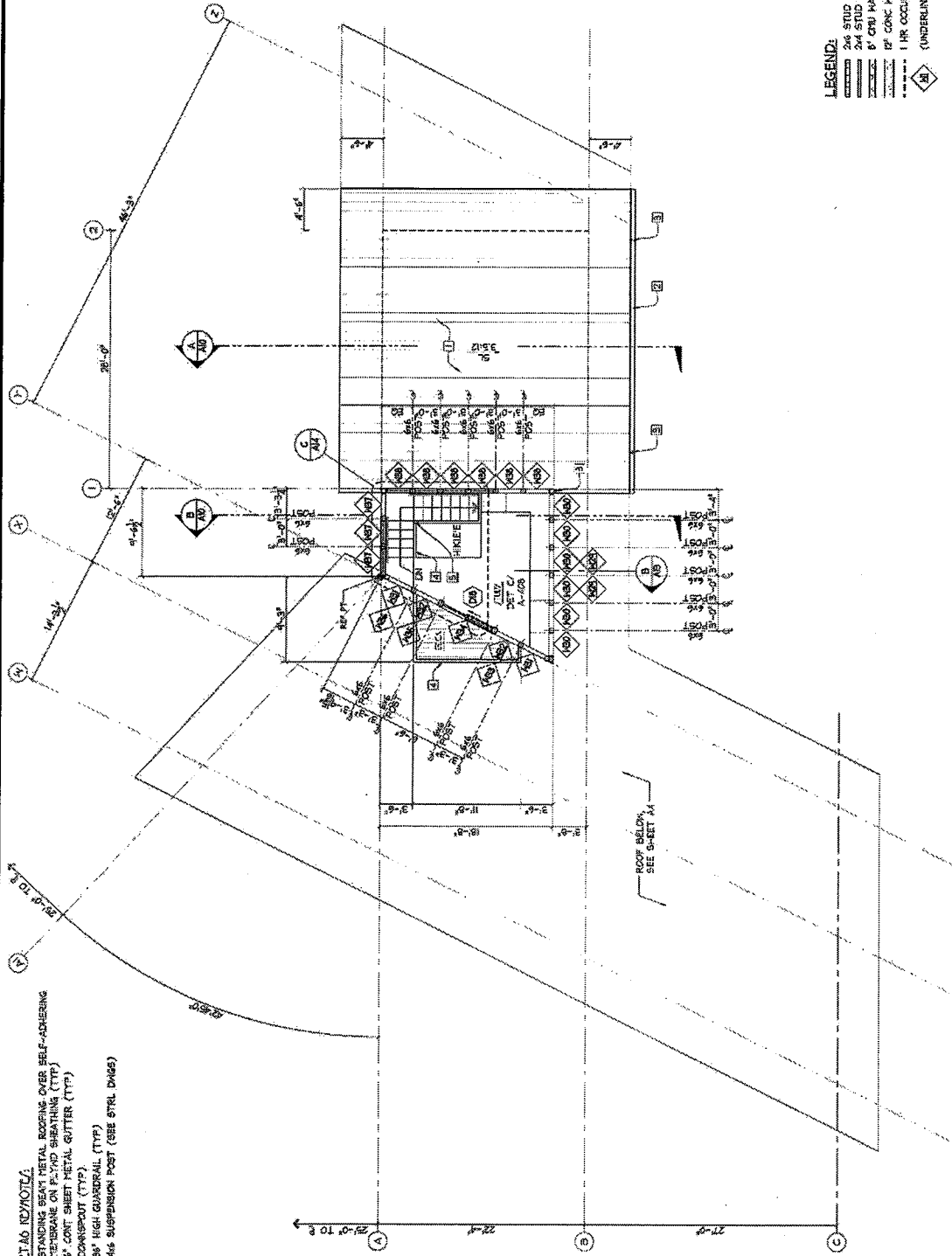
LOWER LEVEL FLOOR PLAN

SECOND LEVEL FLOOR PLAN

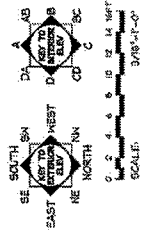


SECOND LEVEL FLOOR PLAN

- PROJECT NOTES:**
- 1 STANDING SEAM METAL ROOFING OVER SELF-ADHERING MEMBRANE ON PLYWOOD SHEATHING (TYP)
 - 2 6" CONT SHEET METAL GUTTER (TYP)
 - 3 DOWNSPOUT (TYP)
 - 4 36" HIGH GUARDRAIL (TYP)
 - 5 4x4 SUSPENSION POST (SEE STRL DWGS)

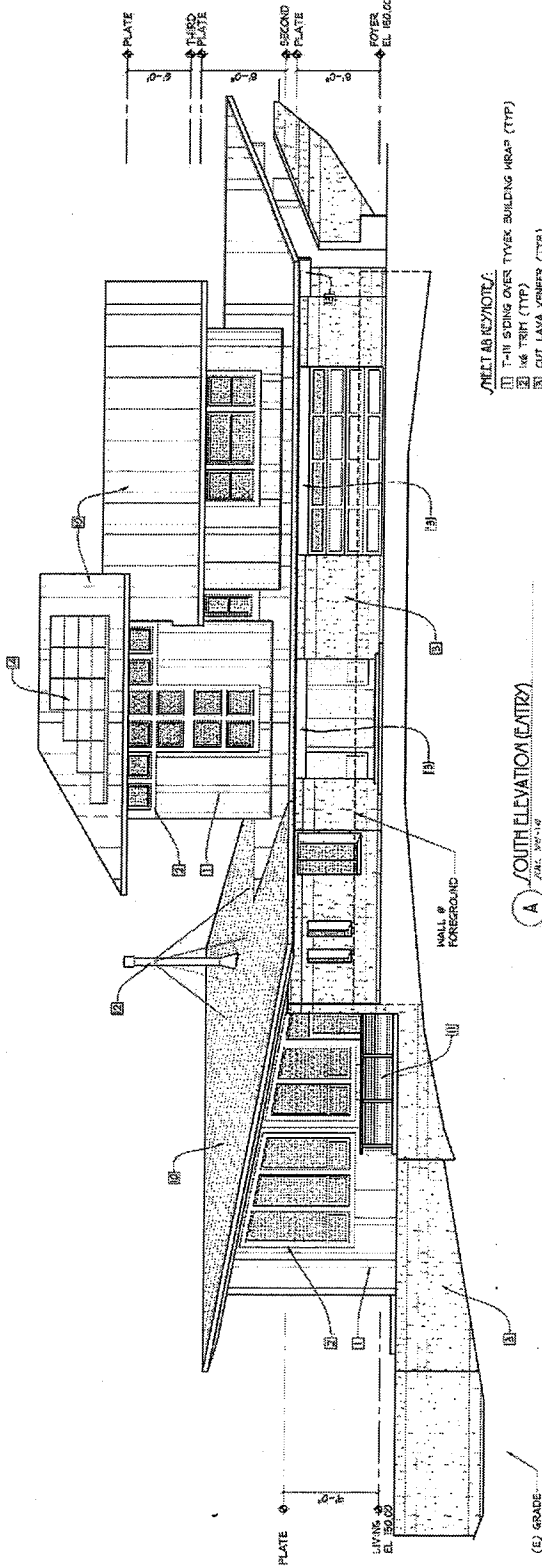


- LEGEND:**
- 24" STUD WALL
 - 24" STUD WALL
 - 8" CMU WALL
 - 8" CONC WALL
 - 1 HR OCCUPANCY SEPARATION (UNDERLINED) BOTTOM HINDOX
 - 1 HR OCCUPANCY SEPARATION (UNDERLINED) BOTTOM HINDOX



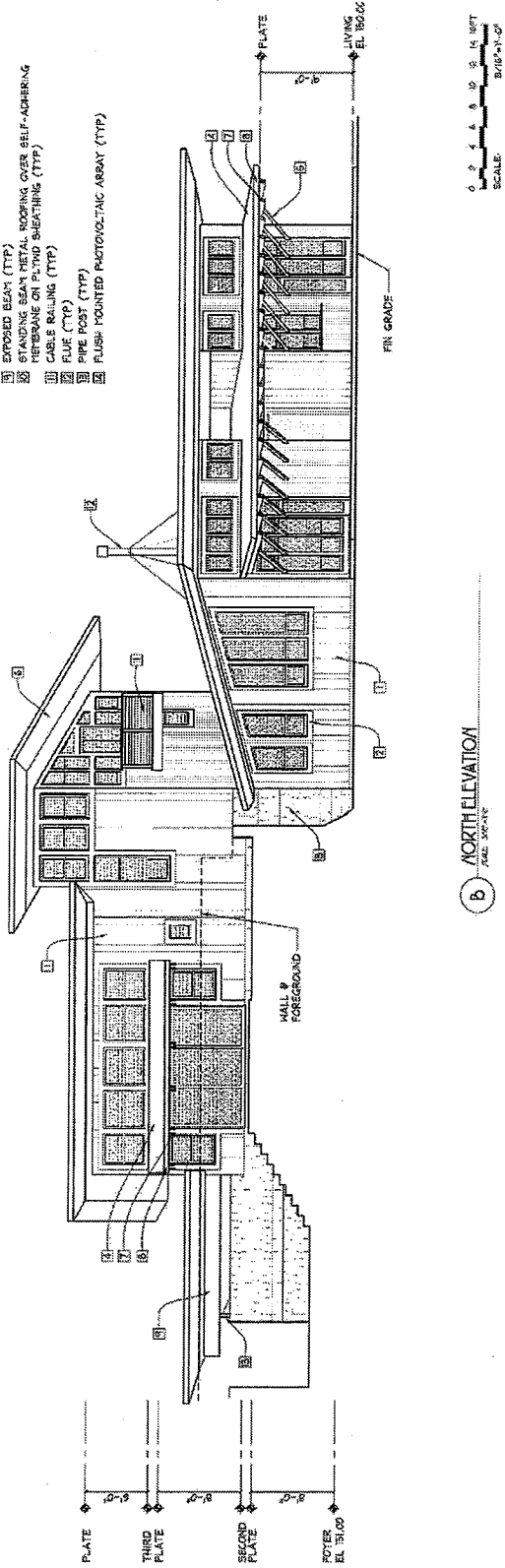
A THIRD LEVEL - FLOOR PLAN
AREA 300'-0" X 300'-0"

THIRD LEVEL FLOOR PLAN



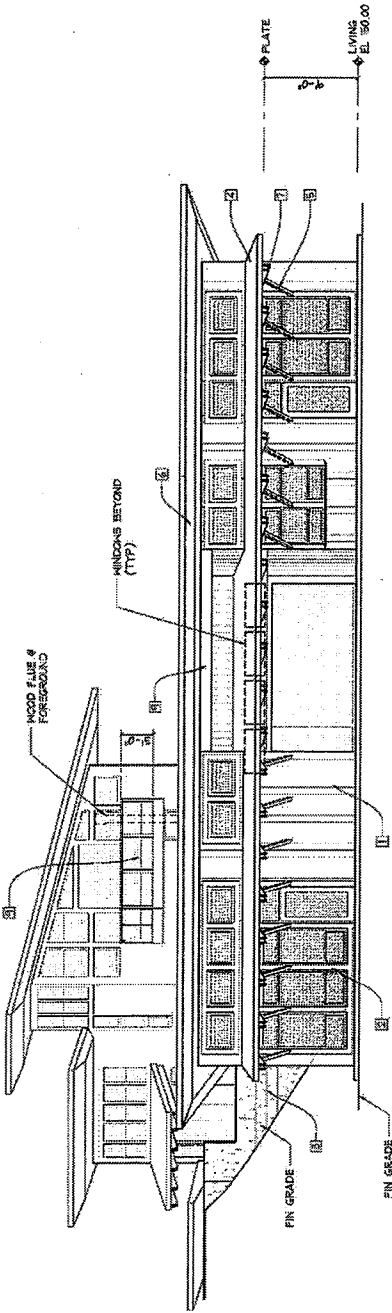
- SHEET AB 10/21/02/2**
- 1 T-111 SIDING OVER TYVEK BUILDING WRAP (TYP)
 - 2 1/4" TRIM (TYP)
 - 3 1/4" LAVA WEAVER (TYP)
 - 4 LEAN POLYCARBONATE SHEET OVER TRELLIS (TYP)
 - 5 KNEE BRACING (TYP)
 - 6 2x4 CEDAR SOFFIT (TYP)
 - 7 2x4 CEDAR BRACING (TYP)
 - 8 2x4 TRELLIS FRAMING (TYP)
 - 9 2x4 TRELLIS 9" OC (TYP)
 - 10 EXPOSED BEAM (TYP)
 - 11 STANDING BEAM METAL SPOKING OVER SELF-ADHERING MEMBRANE ON PLYWOOD SHEATHING (TYP)
 - 12 CABLE RAILING (TYP)
 - 13 PIPE POST (TYP)
 - 14 FLUE (TYP)
 - 15 FLUSH MOUNTED PHOTOVOLTAIC ARRAY (TYP)

A SOUTH ELEVATION (ENTRY)



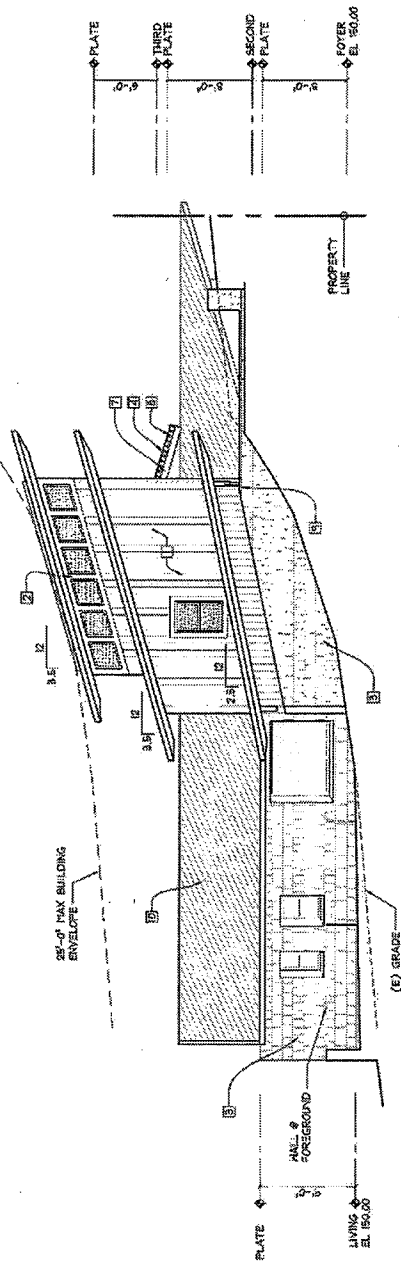
B NORTH ELEVATION

ELEVATION DRAWINGS



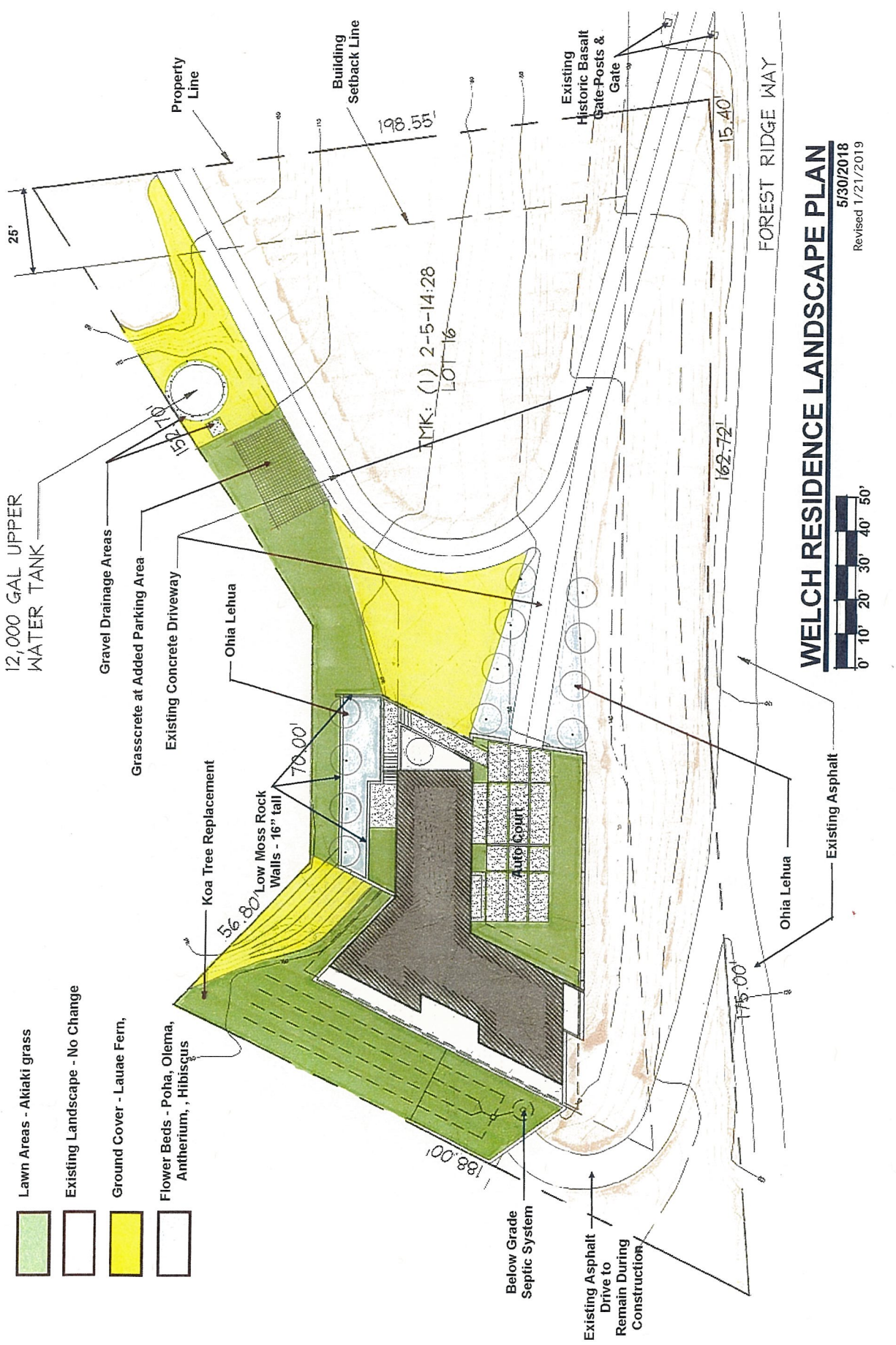
- NOTE AS NOTED:**
- 1 T-11 SIDING OVER TYVEK BUILDING WRAP (TYP)
 - 2 1/4" TRIM (TYP)
 - 3 GUT LAVA VENER (TYP)
 - 4 LEAN POLYCARBONATE SHEET OVER TRELLIS (TYP)
 - 5 4x4 KNEE BRACING (TYP)
 - 6 1x6 CEDAR SOFFIT (TYP)
 - 7 2x6 TRELLIS FRAMING (TYP)
 - 8 2x6 TRELLIS & 6" OC (TYP)
 - 9 EXPOSED BEAM (TYP)
 - 10 STANDING SEAM METAL ROOFING OVER SELF-ADHERING MEMBRANE ON PLUMB SHEATHING (TYP)
 - 11 CABLE RAILING (TYP)

A NORTH WEST ELEVATION
PANEL 372-12



B NORTH ELEVATION
PANEL 372-13

ELEVATION DRAWINGS



- Lawn Areas - Akiaki grass
- Existing Landscape - No Change
- Ground Cover - Lauae Fern,
- Flower Beds - Poha, Olema, Anthurium, Hibiscus

WELCH RESIDENCE LANDSCAPE PLAN
 5/30/2018
 Revised 1/21/2019



LANDSCAPING PLAN

LIST OF PROPOSED MITIGATION MEASURES/BEST MANAGEMENT PRACTICES

- The total amount of land disturbance will be minimized;
- The construction contractor will be limited to the delineated construction work areas within the lot;
- The contractor will not allow any sediment to leave the site;
- Construction activities with the potential to produce polluted runoff will not be allowed during unusually heavy rains or storm conditions that might generate storm water runoff;
- Cleared areas will be replanted or otherwise stabilized as soon as possible;
- Establish marked areas for preservation which will be verified and clearly marked prior to clearing and grubbing operations. Workers will be instructed to honor these areas;
- Any proposed trenching will be kept as far away from tree trunks as possible, and trenches will be filled in as soon as possible to avoid root drying;
- Equipment and vehicles will be kept away from trees to prevent damage to trunks and roots;
- Any damaged trees will be examined and treated, if required, by an arborist;
- Straw or wood mulch, soil binders, or other dust control measures will be applied to stabilized slopes and areas prone to erosion to reduce job site dust emissions;
- Disturbed area will be re-vegetated as soon as possible;
- All construction equipment will be properly maintained to perform at maximum efficiency;
- Construction activities will only take place between 8 AM and 5 PM;
- Should historical remains such as artifacts, burials, or concentrations of charcoal be encountered during construction, work will immediately cease in the vicinity of the find and the area protected from further damage. The contractor will immediately contact the State of Hawai'i Historic Preservation Division to assess the significance of the find and recommend appropriate mitigation measures, if required;
- Concrete trucks will not be washed out on-site;
- Temporary sanitary facilities will not be located near drainage areas or areas that may collect water;
- Since there are occasional high winds in the area, sanitary facilities will be secured to prevent overturning;
- Soil stockpiles will not be located in drainage ways;
- Fences, traps, basins, or barriers will be used downslope of all disturbed areas and material stockpiles to prevent erosion;
- Surface water will not be allowed to flow over exposed slopes greater than 50% or areas prone to erosion without protection;
- Disturbed slopes at final grade and those not worked within 14 days will be stabilized;
- Onsite storage of the minimum practical quantity of hazardous materials necessary to complete the job;
- Fuel storage and use will be conducted to prevent leaks, spills, or fires;

- Products will be kept in their original containers if possible, and original labels and safety data will be retained;
- Manufactures' instructions for proper use and disposal will be strictly followed and will adhere to all applicable regulations;
- Onsite vehicles and machinery will be monitored for leaks and receive regular maintenance to minimize leakage;
- Construction materials, petroleum products, waste, debris, herbicides, pesticides, and fertilizers will be prevented from blowing, falling, flowing, washing, or leaching into the watershed;
- Fueling of construction equipment will be restricted to areas designated for that purpose and protected against spills. Drip pans or absorbent padded will be placed under vehicles/equipment if being fueled in areas other than impervious surfaces;
- All vehicles that regularly enter and leave the site will be fueled off-site;
- All spills will be cleaned up immediately after discovery using absorbent materials that will be properly disposed of; and
- Regardless of size, spills of toxic or hazardous materials will be reported to the appropriate government agency.