Ms. Genevieve Salmonson, Director  
Office of Environmental Quality Control  
State Office Tower  
235 South Beretania Street, Room 702  
Honolulu, Hawaii 96813

Dear Ms. Salmonson:

Subject: Finding of No Significant Impact (FONSI) for Honolulu Police Training Academy Indoor Firing Range  
TMK: 9-3-02: por. 9  
Waipio, Ewa District, Oahu

The Department of Design and Construction has reviewed the comments received during the 30-day public comment period which began on May 8, 2000. The agency has determined that this project will not have significant environmental effects and has issued a FONSI. Please publish this notice in the July 23, 2000 Environmental Notice.

We have enclosed a completed OEQC Publication Form and four copies of the final EA.

Please call Mr. Curtis Kushimaiego of my staff at 527-6332 if you have any questions.

Very truly yours,

GARY Q. L. YEE, AIA  
Director

GQLY:li  
cc: Police Dept.
FINAL ENVIRONMENTAL ASSESSMENT

(HONOLULU POLICE TRAINING ACADEMY
INDOOR FIRING RANGE)
Portion Waipio, Ewa District, Oahu, Hawaii

Prepared for
Department of Design and Construction
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

July 2000
FINAL ENVIRONMENTAL ASSESSMENT

HONOLULU POLICE TRAINING ACADEMY
INDOOR FIRING RANGE
Portion Waipio, Ewa District, Oahu, Hawaii

Prepared in Partial Fulfillment of the Requirements
of Chapter 343, Hawaii Revised Statutes, Title 11,
Chapter 200, Hawaii Administrative Rules,
Department of Health, State of Hawaii and
Chapter 25, Revised Ordinances of Honolulu

Prepared for
Department of Design and Construction
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Prepared by
Sam Chang Architects Inc.
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Honolulu, Hawaii 96814

July 2000
SUMMARY INFORMATION

Project: Honolulu Police Training Academy
Indoor Firing Range

Proposing Agency: Department of Design and Construction
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Accepting Authority: Department of Design and Construction
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Tax Map Key: 9-3-02: por. 9
Land Area: 2,520,961 Square Feet/57.87 acres
Building Site Area: Approximately 42,000 Square Feet
Land Owner: City and County of Honolulu

Existing Use: Honolulu Police Academy
Building Site: Vacant, Open Space

State Land Use Designation: Agricultural
Development Plan Area: Central Oahu
Land Use Map: Public Facility
Public Facilities Map: Police Station
Zoning: P-2 General Preservation

Special Management Area: Within SMA

Need for Assessment: Use of County Lands and Funds
Major SMA Permit Required

Contact Person: Curtis Kushimaeko
Department Design and Construction
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Telephone: 527-6332
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SECTION 1  DESCRIPTION OF THE PROPOSED PROJECT

The Department of Design and Construction, City and County of Honolulu, proposes to construct an indoor firing range on the grounds of the Honolulu Police Academy located on Waipio Peninsula in the town of Waipahu, portion Waipio, Ewa District, Oahu. The property is identified as tax map key 9-3-02; part 9 encompassing an area of 57.87 acres. The Honolulu Police Academy is bounded by City facilities on the north (Honolulu Fire Department and Police Department Maintenance Facilities and the Waipahu Sewer Pump Station), Ted Makalena Golf Course on the east, the former Waipahu Incinerator on the south, and Waipahu Depot Street on the west. A Location Map is shown in Figure 1.

A. Background Information and Purpose of the Project

The Honolulu Police Department ("HPD") conducts firearms training for recruits and annual recall qualification for in-service officers at the Koko Head Rifle Range, a municipal recreation facility. HPD shares the use of the Koko Head Rifle Range with the public and federal, state, and military law enforcement personnel.

HPD has pointed out several problems with the use of facilities at the Koko Head Rifle Range for recruit training and annual qualification. These problems include:

- The range is located about 10 miles from Ke Kula Maka’i—the Police Academy;
- An outdoor area with benches is used as a classroom;
- Instructors are unable to use modern equipment such as overhead projectors or video equipment;
- Constant gunfire distracts and interferes with instructor-class dialogue;
- Live fire is conducted in an open field with no protection from the elements;
- Inclement weather forces rescheduling of qualifications creating a scheduling backlog for staff and officers; and
- Training is limited to Monday-Fridays and occasionally Saturdays. Shooting time is limited to between 7:00 AM and 9:00 PM.

Although the Koko Head Rifle Range has served as the training/qualification center for HPD for the past 33 years, the Honolulu Police Department has determined that firearms training of recruits and officers would be best served if HPD has its own firing range. The firing range should be located at the Honolulu Police Academy ("Police Academy") and given limitations that preclude construction of an outdoor firing range, an indoor firing range will adequately accommodate current and future firearms training needs.

HPD is staffed with approximately 2,000 officers. The national standard for a police department the size of 2,000 officers is to qualify officers three to four times a year. The current qualification standard for HPD is once annually with the issued service pistol, rifle, shotgun, and any supplemental weapons. Besides firing their weapons, officers are required to attend a minimum of four hours of classroom training as part of the qualification procedure. Recent federal rulings mandate police officers qualify twice a year with the issued firearms, thus, the number of training days per year has doubled for HPD.
City ordinance also requires HPD to train and license security guards and armored car personnel who carry firearms. Classroom training is scheduled 12 times per month for 2 hours per session and live fire training is scheduled 12 times per month for 6 hours per session.

Even with their own firing range, the Koko Head Rifle Range will still be needed and used by HPD.

B. Technical Characteristics

The proposed indoor firing range and support facilities will be housed in a structure to be constructed on approximately 42,000 square feet of vacant land ("building site") located on the eastern portion of the Police Academy as shown in Figure 2. The site is the same as that proposed in the Master Plan Report Police Training Facilities (Matsumura, 1984) shown in Figure 3. The building site was left vacant while police training facilities were built on adjoining areas in anticipation of constructing a firing range. The building will be oriented north-south with the qualifying range located on the south side of the building facing the Pursuit Course skid pad.

The rectangular shaped structure measures approximately 38,100 square feet (254 feet long x 150 feet wide) overall. The building floor (mat or pile foundation) and walls will be constructed of poured in place concrete with walls a minimum of 8" thick. A flat roof is proposed and will be supported on long span concrete tees with insulation and membrane waterproofing. The ceiling above the firing line will be built of steel baffles (Level 3 armoring). The concrete walls and ceiling materials should contain bullets and bullet fragments entirely within the structure. Bullets, however, may be able to exit the building through the HPD requested Vehicular Access Doors, and therefore, HPD must assume liability for and manage firing range operations to prevent that from happening. A Floor Plan is shown in Figure 4.

Generally, the building will be a one-story structure about 20-feet in height. Two, two-story simulation rooms, however, are proposed for the northern end of the building. The second level, which would house projection booths for the simulation rooms, stands about 36 feet above finish grade (See Figure 5).

For noise containment and safety purposes, the qualifying range side of the building is designed with a minimal number of openings. All doors into the qualifying range will be covered with built-up insulation. No windows are planned along either side of the qualifying range.

A ventilation system will collect airborne emissions generated at the firing range, filter out particulates primarily airborne lead, and exhaust spent air outside the building. The system will be designed to minimize the exposure of officers and staff to airborne lead. The classroom side of the building will be air conditioned using a separate system from that of the firing range.

Security alarms and a fire suppression system will be installed throughout the entire building.

Water, sewer, and drainage systems will connect to existing systems serving the Police Academy. Floor drains will be provided for hosing down the range area. Chipped concrete, bullet fragments, and other range debris will be trapped before they can enter the drainage system. Range debris will be collected regularly from the traps and stored in Environmental Protection Agency (EPA) approved containers for removal and proper disposal.
Approximately 90% of the structure is devoted to the qualifying range. The remaining building space would house support facilities including a simulation room, briefing room, repair room, target storage alcove, rangemaster's room, office, men and women's toilets, shower and locker room, and kitchenette. Space allocation is shown in Table 1 followed by a description of the individual spaces.

<table>
<thead>
<tr>
<th>Space</th>
<th>Area (sf)</th>
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<tbody>
<tr>
<td>Qualifying Range</td>
<td>28,621</td>
</tr>
<tr>
<td>Simulation Room (2)</td>
<td>1,476</td>
</tr>
<tr>
<td>Projection Booth (2nd Floor)</td>
<td>468</td>
</tr>
<tr>
<td>Briefing Room</td>
<td>1,563</td>
</tr>
<tr>
<td>Office</td>
<td>1,674</td>
</tr>
<tr>
<td>Repair Room</td>
<td>600</td>
</tr>
<tr>
<td>Vault</td>
<td>625</td>
</tr>
<tr>
<td>Target Storage Alcove</td>
<td>433</td>
</tr>
<tr>
<td>Rangemaster's Booth</td>
<td>192</td>
</tr>
<tr>
<td>Cleaning</td>
<td>180</td>
</tr>
<tr>
<td>Restroom (Men and Women)</td>
<td>261</td>
</tr>
<tr>
<td>Locker/Shower/Delage Shower</td>
<td>312</td>
</tr>
<tr>
<td>Lounge/Kitchenette</td>
<td>156</td>
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<tr>
<td>Custodian</td>
<td>37</td>
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<tr>
<td>SWAT Storage</td>
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<tr>
<td>Storage Room (3)</td>
<td>306</td>
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<tr>
<td>Corridors (2)</td>
<td>1,386</td>
</tr>
<tr>
<td>Stairs</td>
<td>394</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>38,974 square feet</strong></td>
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</tbody>
</table>

1. Indoor Range

a. Qualifying Range

The range will be used by HPD recruits for firearms training and in-service officers for annual qualification. Thirty (30) firing points/lanes are proposed. Each firing lane is 150 feet long by 5 feet wide. The qualifying range will be designed by others under separate contract.

Officers will be able to fire from a static firing position at the head of each firing lane generally in the prone or standing position. They will fire at targets suspended from the ceiling which swivel to show or hide from the officers. Additionally, pneumatic pop up or pop down targets at specified range intervals also may be used or floor mounted "running man" targets (targets which move horizontally across the range) will be provided for target practice.

The range also will be designed to allow Special Services Division personnel to walk down the firing lane with their weapons and fire at targets presented to them. In summary, firing will occur from static and moving positions from the firing line up to the targets depending on the training exercise.

Bullet traps at the end of each firing lane will receive and contain expended bullets and bullet fragments. The type of bullet trap has not been selected but a combination steel and hanging sheet rubber trap is under consideration. The choice of trap also depends on the type of ammunition.
being used. Steel traps work well when frangible rounds (lead free and without a lead jacket) are used; it also works well with shotguns. Another steel trap with a fluid feature works when a combination of lead or jacketed rounds may be used (but not with frangible rounds). In steel traps, bullets and fragments can be directed into a collection tray. In rubber traps, rounds are imbedded into the rubber berm and must be periodically "harvested". The range is oriented north-south with bullet traps to be located on the Pursuit Course skid pad side of the range. Earth, sand, and water traps are not proposed because of the potential for lead contamination. The above ground traps will be emptied periodically and lead stored in EPA approved containers for removal by hazardous waste specialists.

HPD proposes to use leaded ammunition for training and qualification purposes and the range and bullet traps will be designed for that type of ammunition.

The range will be open 24 hours a day, Mondays through Fridays. HPD has and will continue to be on an accelerated recruit training schedule to put trained police officers into the field. Three training classes per year (approximately 60 recruits per class) will cycle through the Police Academy annually for the next several years. HPD also will hold qualification classes twice a year for all its officers. Tentatively, up to 240 officers will attend qualification classes every month. For scheduling purposes, recruits will use the range during the day and in-service officers during the night.

Each officer must fire issued duty ammunition from the duty gun (Smith & Wesson, Model 5906 9mm semi-automatic pistol). Police recruits are trained to shoot the Remington 870 12-gauge shotgun and Colt AR-15 rifle. Qualification with these firearms is also required for personnel issued these weapons. The Specialized Services Division uses Remington 700 bolt action rifles (308 and 223 caliber) which will be fired at the range contingent upon proper review and specialized design by the manufacturer of the bullet trap.

Range officers will be assigned to the firing line to supervise training qualifications. All officers are currently required to wear safety goggles or impact resistant glasses during firing and the use of hearing protectors (earmuffs) will be mandatory. First aid measures include a de-luge shower and eyewash basin.

b. Shooting House

A modular shooting house will be used to train officers in close in-live fire exercises inside a structure. Movable partitions will be positioned to form separate rooms and corridors much like the interior of a house or apartment. One officer at a time enters the house and is presented with different scenarios requiring the officer to draw and discharge (or not discharge) his/her weapon. The shooting house will enable officers to shoot 360 degrees. Partitions used to form the walls are bullet proof. The shooting house will be erected inside the qualifying range.

2. Support Facilities

a. Briefing Room

Two 28-seat briefing rooms will be used to administer firearms related training and instruction. The rooms share a common partition wall that can be opened to accommodate larger classes. The briefing rooms will also be used for non-firearms instruction.
b. Simulation Room

The simulation room is a two-story building housing a computer based system that projects a video scenario onto a screen. The officer being tested uses an inert weapon that fires a laser light onto the screen. The officer will respond to the scenario with an appropriate level of force (OC (oleoresin capsicum or pepper) spray, baton, gun). No live fire is proposed within the simulation room. A video projection room will be located on the second floor. Two simulation rooms are proposed.

c. Rangemaster’s Booth

The Rangemaster’s Booth is the control point for all firing exercises and will be accessible from the Range Office. The booth overlooks the qualifying range with complete visual access to the entire firing line for overall supervision.

d. Repair Room

This room will be used by the HPD gunsmith to repair Police Department weapons. The room will be equipped with power tools (free-standing and bench tools) used to repair weapons.

e. Office

Office space to be used by personnel administering the firing range. The office will accommodate 15 officers.

Ammunition used at the range will be stored in a vault in this room. The vault is large enough to hold four pallets of ammunition with additional space for two 1,000 pound safes. Access to the vault will be restricted and it will be equipped with security alarm and fire suppression systems.

f. Target Storage Alcove

This area will be used to store range targets, for pasting targets to frames, and for frame repairs.

C. Economic Characteristics

The project will be built in one phase at an estimated cost of $9.88 million and will be funded by the City and County of Honolulu. Construction will commence after all necessary permits are received.

D. Land Tenure

The Honolulu Police Academy is built on land owned by the City and County of Honolulu.

E. Social Characteristics

No residence or business establishment will be displaced by the proposed action.

The qualifying will not be open for public recreation. Use of the indoor range by federal, state, and military law enforcement personnel will depend on availability.
SECTION 2 DESCRIPTION OF THE AFFECTED ENVIRONMENT

Information on the affected environment presented in this Assessment was excerpted from documents prepared for projects at the Honolulu Police Academy and for projects in the vicinity of the Police Academy. The referenced documents are cited below.

- Environmental Impact Statement Fire and Police Training Facility (Group Architects Collaborative, 1975)
- Environmental Assessment Fire Department Storeroom and Vehicle Maintenance Facilities and Police Department Vehicle Maintenance Facility (Belt Collins Hawaii, 1993)
- Environmental Assessment Police Training Academy Classrooms (Park, 1998).
- Environment and Enhancement Plan for Pauhala Marsh, Oahu, Hawaii (Ducks Unlimited Inc. 1997).

A. Existing Conditions

The Honolulu Police Academy or Ke Kula Maka'i occupies approximately 15 acres of land on Waipio Peninsula which separates Middle and West Lochs of Pearl Harbor. The site is part of a larger 57.87 acre parcel (TMK: 9-3-02: por. 9) owned by the City and County of Honolulu.

The Police Academy first opened in 1988. The City initially proposed to build a joint Police/Fire Training Facility at the site and a Master Plan and Environmental Impact Statement were prepared for a joint training center. In 1979, the scope of the project was reduced. A fire training facility was built near the Honolulu International Airport to accommodate the training needs of the Honolulu Fire Department and the Police Academy was constructed at its current location.

Existing facilities at the Police Academy include a 2-story Administration and Classroom Building, driver training (pursuit) course, a 4-story gymnasium/locker room, vehicle maintenance building, parking lots, landscaped open spaces, and a jogging path along the perimeter of the Police Academy. Except for steel gates at the entry, the entire Police Academy is enclosed by 6-foot high chain-link fencing. A Criminal Investigation Building, canine training building/area, and S.W.A.T. area are located to the southwest of the main grounds but physically separated from it by a 35-foot wide easement. Construction of two, single-story, temporary classroom buildings adjoining the gymnasium on its south side will commence shortly.

Twenty-four instructors, including three instructors who work the Koko Head Rifle Range, are assigned to the Police Academy. In addition, six to eight more instructors are assigned to the Police Academy to support the intensive annual recall training program and another four instructors are currently assigned to accelerated recruit training.

The building site is bounded by two proposed temporary classroom buildings on the north, a section of the jogging path and a perimeter fence on the east (about 40 feet from the building site), the vehicle skid training pad on the south, and the pursuit course and vehicle maintenance facility on the west. The perimeter fence separates the Police Academy from a section of the Ted Makalena Golf Course.
located beyond the perimeter fence. The building site measures approximately 36,000 square feet and is vacant and undeveloped (See Photographs 1 and 2).

B. Topography

The Police Academy once was a flat low-lying area with elevations averaging approximately 4 feet above sea level. Portions of the site below sea level were constantly inundated due to the high water table in the area. The high water table allowed for rice growing and subsequent use as a silting basin until 1962. Filling and surcharging prior to the construction of the Police Academy raised the ground elevation to an estimated average of 9 feet above sea level.

Approximately 5,900 cubic yards of surcharge material covers the building site (See Photographs 1 and 2). The top of fill ranges from 12'3" to 13'0" in elevation and is 4 to 5 feet higher than ground level. The surcharge material appears to be a mixture of soil, crushed limestone, and basalt aggregate.

C. Soils

Soil Conservation Service (1972) maps a single soil type on the site as fill land (Fd). In the Waipahu area, this land type consists mostly of areas filled with bagasse and slurry from sugar mills (SCS, 1972; Noda, 1998). Following its use as a silting basin, the site was used to land fill ash and refuse residue from the Waipahu Incinerator. When the Police Academy was constructed, all ash material above the 6-foot elevation was removed and the site filled with select borrow. All areas were then compacted and graded to design elevations. Selected areas were surcharged in anticipation of building construction.

Ash removed from the site was disposed at an approved disposal site located to the southwest of the Police Academy. The ash disposal site is generally bounded by Kapakahi Stream to the north, West Loch to the west and south, and the Waipahu Incinerator and US Navy property to the east. The City is proposing to close the ash disposal site.

D. Hydrology

Based on aquifer classification records (Mink and Lau, 1990), Waipio Peninsula is situated over the Waiawa aquifer system of the Pearl Harbor aquifer sector. Two basal aquifers have been identified. The upper aquifer (Aquifer/Status Code: 30202116/12211) is a basal unconfined aquifer in sediment which confines the lower aquifer in flank lavas of the Koolau Basalt. The lower aquifer (Aquifer/ Status Code 30201121/12212) is artesian discharging primarily via springs along the northern portion of Pearl Harbor (Belt Collins Hawaii, 1993). It is also a drinking water source. Based on the status codes, both aquifers are currently used, considered ecologically important, and furnish irreplaceable water low in salinity.

The Police Academy is situated downgradient (makai) of the Underground Injection Control Line (UIC) in this area of Oahu (Noda, 1998).

E. Surface Water

There are no freshwater streams or water bodies on the site. About one-quarter mile from the building site, Kapakahi Stream flows south along the west side of Waipahu Depot Street. Below Farrington Highway, the stream is confined to an exposed earthen channel which disappears into a tangle of
vegetation opposite the Police Academy. The stream was once the primary outlet to West Loch for Waikolu Stream. After severe flooding in the 1950s, a direct channel was cut between Waikolu Stream and West Loch to avoid flooding of Waipahu town (Belt Collins, 1993). Kapakahi Stream continues to discharge into West Loch and its flow today originates from spring water and storm water runoff.

F. Flood Hazard

Flood Insurance Rate Maps for Waipahu designate three flood zones in the vicinity of and including parts of the Police Academy. Most of the Police Academy (including the proposed building site) is designated Zone D which are areas in which flood hazards are undetermined (Federal Emergency Management Agency, 1989). Land between Kapakahi Stream and an easement which lies in a shallow gully separating the main grounds of the Police Academy from specialized training facilities adjoining Waipahu Depot Street is designated Zone AE which is defined as "areas of the 100-year flood". The third flood zone, XS, which is defined as "areas of 500 year flood" is designated along the western edge of the main grounds of the Police Academy (Comment, Department of Planning and Permitting, 2000).

A 35-foot wide easement (the combined width of the 20 and 15-foot wide easements) separates the Criminal Investigation Building, canine training area, and S.W.A.T. building from the rest of the Police Academy. The easements lies in a shallow gully about 4 feet deep. The gully intercepts and conveys runoff from Waipahu Depot Street off the property in the direction of the Waipahu Incinerator.

According to Civil Defense Tsunami Inundation maps, Waipio Peninsula is not subject to inundation from tsunami or storm waves.

G. Historical Features

There are no archaeological or cultural features on the Police Academy grounds. In reviewing the Draft Environmental Assessment prepared for the "Police Training Academy Classrooms", the Historic Sites Division commented "A review of our records shows that there are no known historic sites at the project located. Because it is highly unlikely that historic sites will be found in this filled and graded parcel, we believe that this project will have no "effect" on historic sites (DLNR, 1998)."

H. Flora and Fauna

The building site is vegetated by ground cover including Bermuda and St. Augustine grasses and wayside weeds. Hong Kong Orchid and Formosan Koa are the only specimen trees in the vicinity of the building site.

Except for rice birds and cattle egrets, no animals or wildlife were observed on the premises.

Two wildlife refuges are located about 2 miles on either side of Waipio Peninsula. The Pearl Harbor National Wildlife Refuge Waialua Unit to the east on Waialua Peninsula borders on Middle Loch and is about 24.5 acres in size. The Pearl Harbor National Wildlife Refuge Honouliuli Unit, which is about 37 acres in area, borders on the west shore of West Loch. Both refuges include ponds and nesting areas for waterbirds including the federally listed Hawaiian Coot (Fulica alai) and Hawaiian Stilt (Himantopus mexicanus knudseni). Both species are known to frequent the mud flats near the mouth of Kapakahi Stream (GCA, 1975).
Pouhala Marsh (formerly identified as Pouhala Fish Pond) lies to the west of Waipahu Depot Street. The Division of Forestry and Wildlife (Department of Land and Natural Resources, State of Hawaii), the US Fish and Wildlife Service, the City and County of Honolulu, and Ducks Unlimited, Inc. are preparing an enhancement plan for the marsh. The plan proposes expanding the marsh from 24 to 70 acres to create nesting areas and habitat for endemic birds and other water fowl. The Hawaiian stilt is known to nest at the site. Recent State waterbird surveys have observed the Hawaiian Duck (Anas wyvilliana) and Hawaiian Moorhen (Gallinula chloropus sandwicensis) frequenting the marsh (Ducks Unlimited, Inc., 1997). Both species are federally listed as endangered. The US Fish and Wildlife Service (Comment, 2000) indicated that Pouhala Marsh also provides habitat for the following federally protected migratory bird species: Kolea or Pacific golden-plover (Pluvialis fulva), 'Uilii or wandering tattler (Heteroscelus incanus), 'Akekeke or ruddy turnstone (Arenaria interpres), and Kioea or bristle-thighed curlew (Numenius tahitiensis).

I. Hazardous Materials

A Phase I Environmental Site Assessment of the building site was conducted by Edward K. Noda and Associates, Inc. (1998). The survey indicated:

- There is no evidence of the current or past presence of underground fuel storage tanks (USTs) on the site.
- There was no sign of ash, grossly stained soils, discolored vegetation, or other distinct evidence that would indicate the presence of contamination by petroleum or other toxic/hazardous substances.
- Two underground storage tanks consisting of the a 6,000 gallon gasoline tank and a 550 gallon used oil tank are buried at the Police Academy Vehicle Maintenance Facility located about 50 feet from the main entry into the proposed firing range building. Both of the USTs were installed in 1998 and both are in compliance with EPA technical standards and financial responsibility as described in Title 40 CFR Par 280.

J. Land Use Controls

State and County land use controls governing the use of the property are listed below.

- State Land Use Designation: Agricultural
- City and County of Honolulu General Plan: Urban Fringe
- Development Plan Area: Central Oahu
- Development Plan Land Use Map: Public Facility, Preservation
- Development Plan Public Facilities Map: Police Station
- Zoning: P-2 General Preservation
- Special Management Area: Inside Special Management Area

The City and County of Honolulu Central Oahu Development Plan Land Use Map Designates TMK: 9-3-02: 09 Public Facility and Preservation. The Public Facility designation applies to portions of the parcel occupied by the Waipahu Incinerator, Honolulu Police Academy, City Tree Nursery, Sewer Pump Station, Waipahu Convenience Center, and the Honolulu Fire Department and Honolulu Police Department Maintenance Facilities. The land area between Waipahu Depot Street and Kapakah Stream is designated Preservation.
Although the Honolulu Police Academy is located within the County delineated Special Management Area (SMA), an enclosed and soundproof firing range was approved under 76/SMA-22 for the Police Training Facility. Therefore a major SMP will not be required (Comment, Department of Planning and Permitting, 2000).

A joint Police/Fire Training Facility was established via State Special Permit (SP 76-248) approved in 1976 by the State Land Use Commission. In 1979, the scope of the project was reduced and only the Police Training Facility was built. The proposed indoor firing range was represented on the original petition for a State Special Permit and is consistent with the conditions imposed on the permit by the State Land Use Commission and the City Planning Commission. Thus, a State Special Permit is not required for the proposed project (Department of Planning and Permitting, 1999).

Three easements, which affected site planning for the Police Academy, are still in existence. A 15-foot wide easement for Oahu Sugar Company's 6" mud and 36" wastewater lines traverses the Police Academy grounds in a north-south direction aligned generally parallel with Waipahu Depot Street. A second easement, 20 feet in width and in favor of the City and County of Honolulu abuts and parallels the first easement. This easement contains a 4" and 24" force main. Both easements are located in a swale about 3-4 feet deep. The swale and 6-foot high chain link fencing physically separates the Mock Crime Building, Special Services Division Building, and Canine Building located along Waipahu Depot Street from the rest of the Police Academy.

A 4" wastewater line for the Waipahu Incinerator lies within a 10-foot wide easement along the eastern property line between the Police Academy and Ted Makalena Golf Course.

K. Acoustical

Existing noise sensitive buildings nearest to the proposed firing range include the Administration, CID, Physical Fitness and SWAT Buildings within the Police Academy (Adams, 1999). Nearby residential housing areas are located north, northwest and northeast of the Police Academy along Haakoa Place, Nawaakoa Place, Awanei Street and Awamolu Street between 1,500 to 2,000 feet from the range. Ambient noise measurements were taken in the vicinity of the range and the following sound levels expressed in units of A-weighted decibels (dBA) were recorded:

<table>
<thead>
<tr>
<th>Location</th>
<th>Leq</th>
<th>L90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waipahu Incinerator</td>
<td>50.2</td>
<td>40.5</td>
</tr>
<tr>
<td>Waipahu Depot Road</td>
<td>49.8</td>
<td>44.0</td>
</tr>
</tbody>
</table>

Leq represents a constant level of sound and L90 represents the noise level that is exceeded 90% of the time during the measurement period. The dominant noise sources at the two measurement locations during the noise measurement were parking activities at the old Waipahu Incinerator and traffic on Waipahu Depot Road, respectively.

L. Public Facilities

Water, wastewater, power and communication services are taken from existing systems along Waipahu Depot Street.
Fronting the Police Academy, Waipahu Depot Street lies within a partially improved 44-foot wide road and utility easement (Nos. 294 and 340). The two-way, two-lane, all weather surface road is 24-feet wide and without curbs, gutters, and sidewalks. The Central Oahu Development Plan Public Facilities Map depicts right-of-way improvements within 6 years.

State Department of Transportation traffic count data at the intersection of Farrington Highway at Waipahu Depot Street indicate that the commuter peak period generally occurs on weekdays between 6:00 to 8:00 a.m. in the morning and 3:00 to 6:00 p.m. in the afternoon. Manual traffic counts taken at the referenced intersection and the entry road into the Police Academy during the peak periods are shown in Figure 6 (Pacific Planning and Engineering, 1999).

The City and County of Honolulu is constructing a 300-acre soccer park ("Waipio Peninsular Soccer Park") to the south of the Police Academy, Waipahu Incinerator, and Ted Makalena Golf Course. The proposed soccer park includes improvements to Waipio Point Access Road, Waipahu Depot Street, and construction of a non-potable water line between Waikiki Stream and the soccer park. Thirty-three regulation soccer fields and a stadium field with an initial capacity of 4,000 spectators are envisioned in the conceptual master plan. Parking for 5,000 vehicles is proposed and the Waipahu Incinerator would be converted into a training center with training facilities, lockers, meeting and conference room, kitchen and dining facilities, and dormitories. A two phase implementation schedule is proposed with Phase 1 scheduled to be completed in 2001.
SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS
AND MEASURES TO MITIGATE ADVERSE EFFECTS

The scope of the project was discussed with the consulting architect, staff of the Department of Design and Construction, and Honolulu Police Department administrators. State and County agencies were contacted for information relative to their areas of expertise. Time was spent in the field noting site conditions and conditions in the vicinity of the project and building sites. The sum total of consultations and field investigations helped to identify existing conditions and features which could affect or be affected by the project. These influencing conditions include:

- The Honolulu Police Academy is a modern facility for training police recruits and in-service law enforcement officers.
- There are no residences within ¼ mile of the building site;
- No rare, threatened, or endangered flora or fauna are found on the premises;
- There are no recorded archaeological or cultural resources on the building site;
- The building site is not located within a flood hazard area;
- The building site is approximately 40 feet from the edge of the 13th fairway of the Ted Makalena Golf Course;
- Poulaha Marsh, a wildlife sanctuary, is located about ¼ mile to the west of the building site across Waipahu Depot Street;
- The stadium field at the proposed Waipio Peninsula Soccer Park is located about 800 feet to the south of the Police Academy and several soccer fields will eventually be within 500 feet of the Police Academy; and
- Road, water, wastewater, and power systems are adequate to accommodate the proposed use.

A. Short-term Impacts

1. Site Work

Site work will probably be the most disruptive construction activity on the environment. This activity entails removing the surcharge and sparse ground cover, grading the building site to design elevation, and excavating for foundations and utility lines.

Site work will expose soil thus creating opportunities for runoff and erosion during construction. Grading will be performed in accordance with erosion control ordinances of the City and County of Honolulu and approved grading plans. Best Management Practices (BMPS) for erosion and drainage control during construction will be prepared for review and approval by the Department of Planning and Permitting. Approximately 6,000 cubic yards of surcharge material and excavated soil will be removed.

2. Air Quality

Site work is a persistent source of fugitive dust. Site contractors are aware that dust is a nuisance to both workers and people living or working near to work sites and it is imperative for them to maintain stringent dust controls. Frequent water sprinkling is probably the most effective dust control measure given the size of the site and the type and scale of proposed improvements. The Contractor, however, may choose to implement other measures based on their experience with similar projects and job sites.
The Contractor will be responsible for general housekeeping of the site and for keeping adjacent training areas free of mud, sediment, and construction litter and debris. Pollution control measures will comply with Chapter 60.1, Air Pollution Control, Administrative Rules, State Department of Health.

3. Noise

Construction noise, like fugitive dust, cannot be avoided. It is not likely that construction work will produce excessive noise that interferes with on-going field training and classroom activities at the Police Academy. The building site is located adjacent to the drivers pursuit course and about 150 yards from the administration building where classroom instruction is conducted. The classrooms are enclosed, air conditioned rooms and any construction noise should not interrupt instruction inside.

Construction noise will be audible in certain areas of the Ted Makalena Golf Course and most pronounced on fairways and greens nearest the Police Academy. The golf course is not considered a noise sensitive area. Noise impacts on golfers cannot be avoided but should not interfere with play.

Maximum permissible daytime noise levels for the Class A zoning district (which includes lands zoned preservation) set by the State Department of Health is 55 dBA measured within the zoning district and at or beyond the property line. Construction work may temporarily exceed this standard and, per Administrative Rules (Chapter 46) of the Department of Health, the Contractor will obtain a Variance from Pollution Controls permit prior to construction. Construction will be limited to between the hours of 7:00 a.m. to 3:30 p.m., Mondays through Fridays.

4. Archaeology

Should subsurface archaeological features be unearthed, work in the immediate area will cease and preservation authorities notified for investigation and proper disposition of the finds.

5. Construction Traffic

Construction vehicles hauling men and material will contribute to traffic on Waipahu Depot Street and Farrington Highway. Material deliveries will be scheduled during non-peak traffic hours to minimize impacts on local traffic. Heavy vehicles traveling to and from the project site will comply with the provisions of Chapter 42, Vehicular Noise Control for Oahu, Hawaii Administrative Rules.

Truck traffic will be most pronounced during site preparation. The volume of surcharge material and soil on the building site will be hauled to a suitable disposal area. Based on the estimated volume of material and an average truck capacity of about 20 cubic yards, it should take approximately 300 truckloads to remove the material. Depending on an excavation and hauling schedule prepared by the site work contractor, 3-5 trucks loaded per hour would generate between 24-40 truck loads per eight hour work day. The volume of material hauled would average between 300-800 cubic yards per day and hauling operations could take about one month.

B. Long-term Impacts

1. Physical Environment

Significant, adverse long-term impacts on the physical environment are not anticipated. The building site is devoid of cultural resources, wildlife, and significant vegetation. There are no streams, ponds,
wetlands, or surface water features on the premises to be affected by the project. The on-going surcharge program should have stabilized the building site and adverse ground settlement problems are not anticipated.

2. Infrastructure

On-site runoff will be collected and discharged into the existing on-site drainage system. Water and wastewater systems are adequately sized to accommodate the proposed use. Electrical power will have to be upgraded to accommodate building lighting, air conditioning, and ventilation systems.

3. Land Use

The proposed facility is consistent with public uses and structures permitted at the Police Academy. An indoor firing range was proposed in 1976 and approved as part of a Special Permit allowing the construction of a joint police and fire training facility (SP76-248). In 1979, the scope of the project was reduced when the Honolulu Fire Department built its own training facility near the Honolulu International Airport. Construction of the indoor firing range will continue the implementation of the Master Plan for Police Training Facilities (Matsumura, 1984). It is one of the last facilities to be built for training purposes and would further consolidate most police training at one location. The goal of centralizing police training facilities for recruits and in-service officers was and continues to be the basis for building and expanding the Honolulu Police Academy.

4. Visual

The structure housing the indoor firing range will replace existing vacant land, thus, presenting a new visual feature at the Police Academy. The structure will not obstruct views of Waipio Peninsula from areas inside and outside the Police Academy. It should be noted that are no significant views of the ocean or mountains from the building site. For functional reasons, the structure is longer than any of the existing buildings but lower in height than other major buildings on the premises such as the Administration Building, Gymnasium, and Control Tower on the adjoining Pursuit Course.

5. Noise

Police recruits and in-service officers will be using the qualifying range 24 hours a day for training and annual qualifications, respectively. The types of weapons to be used at the range include: a) Smith & Wesson, Model 5906, 9mm semi-automatic pistol; b) Remington 700 bolt action rifle (308 and 223 caliber); c) Remington 870, 12-gauge shotgun, and d) Colt AR-15 rifle. Using in-house data and technical literature involving firing ranges, equivalent continuous noise levels \( L_{eq} \) expected inside the range under the worst case scenario (25 simultaneous firearm discharges or nearly simultaneous rapid firing of 25 firearms (10 rounds each within 10 to 15 seconds) are predicted to range from 107 to 115 dBA (D.L. Adams & Associates, 1999)). The peak sound pressure level \( L_{\text{peak}} \) for 25 simultaneous single shots can be expected to be equal or to exceed OSHA’s noise standard. Noise mitigation in the form of administrative or engineering controls and/or personal protective equipment should be provided when the sound levels exceed the 140 dB limit. Possible control measures for the range users include providing earmuffs and installing sound absorbent materials on the walls, ceiling and/or floor of the range to reduce the reverberant sound energy build up in the range.

The maximum permitted sound levels in the Class A zoning district during night hours (10 p.m. to 7 a.m.) is 45 dBA. Sounds of gunfire should be contained within the building but on occasion noise
from night use of the firing range may be audible in surrounding areas. This would occur if doors to the building are left open. Areas immediately adjoining the Police Academy are uninhabited and the nearest residential dwellings are approximately one-quarter mile away. If noise from the firing range creates a nuisance, then HPD will implement measures to curtail noise. Such measures could include administrative controls such as limiting the hours of use or design controls such as installing noise insulation in parts of the building. HPD will also request a Variance from Pollution Controls to allow noise to exceed the maximum permitted sound level during night hours.

Noise from exhaust fans and mechanical equipment required to ventilate the facility could impact nearby noise sensitive areas. Acoustical enclosures, noise barriers, and/or exhaust silencers will be included in the project design to help mitigate mechanical equipment noise in compliance with Department of Health noise regulations.

Golfers will probably hear intermittent crackling of gunfire when playing the 13th hole at Ted Makalena Golf Course. While gunfire may interfere with a golfer’s concentration during play, it is unlikely that it will delay play on this particular hole. Signs can be posted on the 13th tee and fairway to alert golfers of this acoustical intrusion.

Pouhala Wildlife Sanctuary is located about 4 miles to the west of the building site. Construction activities should not affect wildlife frequenting the marsh. The Division of Forestry and Wildlife State Department of Land and Natural Resources and the Fish and Wildlife Service, US Department of the Interior both indicated that the proposed project should not affect wildlife frequenting the Pouhala Marsh (Division of Forestry and Wildlife and Fish and Wildlife Service Comments, 2000). It has not been determined what effect sounds of gunfire would have on wildlife.

6. Hazardous Materials

The use of lead ammunition increases the potential for exposure to lead, a hazardous substance. Many people have become sick or have died from absorption of harmful quantities of lead through inhalation or ingestion. In general the rangemaster and staff who work the range each working day face the highest risk for lead exposure. The rank and file officer using the range of an infrequent basis (say semi-annually) should not be affected. In normal indoor ranges, 80% of airborne lead is caused by the bullet hitting the trap. Twenty percent is from the primer (typically lead styphnate).

The problem with lead is that once it is absorbed into the body, it enters the blood stream and is circulated throughout the body. Some of the lead is filtered out of the body and excreted but some remains in the blood and body tissue. As exposure to lead continues, the amount stored in the body increases if more lead is being absorbed than the body is removing. Lead stored in body tissues can cause irreversible damage to individual cells, organs, and body systems (OSHA).

OSHA has established a Permissible Exposure Level (PEL) standard for employee exposure to an airborne concentration of lead of 50 micrograms per cubic meter of air (50 \( \mu g/m^3 \)) averaged over an 8-hour period. This is the highest level of airborne lead to which workers may be permissibly exposed in an 8-hour workday. If employee exposure to lead reaches the “action level” standard, defined as exposure to an airborne concentration of lead of 30 micrograms per cubic meter of air (30 \( \mu g/m^3 \)) based on an 8-hour period, they must be removed from the exposure situation. If lead concentrations exceed the action level standard, OSHA has established administrative procedures and protective measures that must be taken. The procedures and methods include measures for respiratory protection,
use of protective work clothing and equipment, general housekeeping practices, providing hygienic facilities and practices, medical surveillance, and medical removal protection.

OSHA further mandates medical surveillance be instituted for all persons who are or may be exposed above the action level for more than 30 days per year. Medical surveillance includes medical examinations and procedures and biological monitoring to include blood lead testing.

HPD will comply with the OSHA standards and procedures contained in Title 12, Department of Labor and Industrial Relations, Subtitle 8 Health Standards, Chapter 202, Section 33.1 pertaining to lead and measures for mitigating and treating exposure to lead in the work place.

The ventilation system will collect, filter, and exhaust air outside the building. The system will be designed with the supply side behind the firing line and the exhaust end beyond the bullet traps down range. Air movement will push airborne emissions down range away from officers on the firing line.

State of Hawaii clean air standards permit an emission rate of 0.1 ton/year of lead. High efficiency filters used in the ventilation system can remove 90-99% of airborne dust and smoke. Thus, it is not likely that this emission rate will be achieved. In recognition of the hazards posed by airborne lead and to help reduce the amount of airborne lead, HPD will use frangible (non-leaded) ammunition for training purposes. Modern bullet traps can reduce airborne lead and HPD will consider the use of metal jacketed bullets and non-lead primers to attain this objective. Lead ammunition will be used for annual recall training.

Lead bullets and fragments will be directed into collection trays at each bullet trap. The above ground bullet traps and collection trays will prevent lead from contaminating the underlying soil.

Poured in place concrete was chosen as the principal building material because it can contain bullet fragments and noise within the building. State of the art bullet traps at the target end of the range should capture most bullets and bullet fragments. Bullets striking the steel traps are known to fragment and disperse in various directions or a bullet can ricochet off the trap with potentially harmful consequences. HPD and its firearms instructors and range officers are cognizant of the problems and potential hazards to users of an indoor range. Recruits and in-service personnel are taught range safety and potential hazards during firearms training both in the classroom and on the range.

Range ammunition will be stored in a concrete lined vault inside the indoor firing range. The vault will be equipped with security alarm and fire suppression systems and access will be restricted to qualified personnel. In addition, HPD has established policies and procedures for the safe storage and handling of ammunition and procedures to be taken in an emergency so as to not endanger the lives of its officers, range personnel, and the civilian population.

7. Traffic

Future traffic was forecast for traffic conditions without and with the project. Traffic forecasts were estimated for the year 2001 when the project is expected to be completed.

Future traffic without the project was forecast by adding; (1) existing traffic volumes, (2) increasing the existing through-traffic along Farrington Highway using the historical traffic growth rate and (3) adding traffic from other proposed developments in the area.
Through-traffic is traffic that travels on Farrington Highway without a specific origin or destination near the project site. The growth in through-traffic was estimated using historical data obtained from Department of Transportation ("DOT") traffic count stations along Farrington Highway and linear regression analysis. DOT data indicates a growth trend of about 2% annually along this screen-line. Therefore, the existing peak hour through traffic along Farrington Highway was increased by 6% (2% x 3 years). The growth trend accounts for other developments outside the project vicinity.

Future traffic volumes for year 2001 from the Amfac Commercial and Park Project were estimated based on the project's traffic study. Future traffic volumes for the Waipahu Senior Care Village were also estimated based on the project's traffic study. Traffic forecasts for the proposed Soccer Park were obtained from the Draft Environmental Impact Statement Traffic Report. Only Phase 1 of the Soccer Park was considered since full buildout is expected to be the year 2010 which is well beyond the Police Indoor Firing Range completion time frame. The Soccer Park is not expected to significantly change the traffic flow during the morning peak hour. Therefore, only the afternoon peak hour forecasts were included.

Future traffic with the project was forecast by adding traffic generated by the Police Indoor Firing Range Project to the forecast traffic without the project. The resulting peak hour traffic volume forecasts with the project are shown in Figure 7.

Trip generation was determined based on information on projected facility operations. Table 2 shows the number of trips generated due to the project during the study peak periods.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Morning Peak Hour</th>
<th>Afternoon Peak Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit</td>
<td>Enter</td>
</tr>
<tr>
<td>Indoor Firing</td>
<td>30 stalls</td>
<td>30</td>
</tr>
<tr>
<td>Classroom</td>
<td>60 seats</td>
<td>50</td>
</tr>
<tr>
<td>Staff</td>
<td>15 persons</td>
<td>15</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>95</td>
</tr>
</tbody>
</table>

**Source:** Pacific Planning and Engineering, 1999.

The trip distribution step estimates the distribution of vehicle trips to their predicted destinations and origins. The vehicles entering and exiting the project were generally distributed based on projections of population on Oahu for the project completion year.

The traffic assignment step assigns vehicle trips to specific routes on the roadway network that drivers would take from their trip origin to their destination. Project traffic was assigned to Waipahu Depot Street and then to Farrington Highway.

Analyses were conducted for the study intersections to determine the relative impact of the proposed project. The study analyses were conducted for the existing, 2001 forecasts without project, and 2001 forecast with project traffic conditions. The study intersections were analyzed using methods in the
Year 2001 Weekday Morning and Afternoon Peak Hour Traffic Volumes With Project

Figure 7
1994 Highway Capacity Manual (HCM). This methodology measures traffic operations using the Level-of-Service (LOS) rating, which consists of six letter categories ranging from LOS "A" to LOS "F". Figures 8 and 9 show the LOS for each movement at the study intersections for the weekday morning and afternoon peak hours.

a. Unsignalized Intersection Analysis

The intersection of Waipahu Depot Street with the Project Access was analyzed using the methods for unsignalized intersections. The LOS for unsignalized intersections is determined by total delay which is defined as the total elapsed time from when a vehicle stops at the end of a queue until the vehicle departs from the stop line. This includes the time required for the vehicle to travel from the last-in-queue position. LOS for unsignalized intersections is classified into the six categories ranging from less than 5 seconds of average total delay per vehicle (LOS "A") to over 45 seconds of average total delay per vehicle (LOS "F").

The traffic movements at the intersection of Waipahu Depot Street with the Project Access is expected to operate at LOS "A" for the without or with project conditions.

b. Signalized Intersection Analysis

The intersection of Farrington Highway with Waipahu Depot Street was analyzed using the method for signalized intersections. Operational analysis for signalized intersections is based on average stopped delay per vehicle to measure traffic operating conditions. The LOS for the traffic movements at a signalized intersection is classified into six categories ranging from less than 5 seconds of average stopped delay per vehicle (LOS "A") to over 60 seconds of average stopped delay per vehicle (LOS "F").

With the project, additional green time would be necessary for the westbound left-turn movement on Farrington Highway during the weekday morning and afternoon peak hours. The traffic analysis shows that the intersection can still operate at essentially the same LOS as the without project condition.

8. Police Training

Construction of the proposed indoor firing range will eliminate some of the present shortcomings experienced by HPD at the Koko Head Rifle Range. To reiterate, HPD has pointed out that an outdoor area at the Koko Head Range is used as a classroom, instructors are unable to use modern instructional equipment in an outdoor setting, inclement weather often times forces cancellation of firearms classes and training for recruits and in-service personnel, and sounds of gunfire are a constant distraction to classroom instruction.

The total facility will enable the police to engage in static and dynamic live fire exercises using the qualifying range and shooting house, respectively. The qualifying range occupies most of the building and will be used most intensively. Training can be conducted year 'round except when the range is closed for maintenance and repairs. In terms of numbers, consider that HPD trains up to 180 new recruits annually and must qualify each of its 2,000 officers twice annually with their issued firearm.

Support facilities, such as the classrooms and simulation room, also are necessary to instruct officers in modern firearms techniques and weapons. The addition of two classrooms will help to alleviate a
**Signalized Intersection Analysis - Weekday Morning Peak Hour**

<table>
<thead>
<tr>
<th>Movement</th>
<th>Level-of-Service</th>
<th>2001 Without Project</th>
<th>2001 With Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farrington Hwy with Waipahu-Depot St</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Eastbound LT on Farrington Hwy</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Eastbound TH on Farrington Hwy</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Westbound LT on Farrington Hwy</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Westbound TH/RT on Farrington Hwy</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Northbound LT/TH on WDS</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Northbound RT on WDS</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Southbound LT/TH on WDS</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Southbound RT on WDS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Intersection</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Legend**

- X - Level-of-Service With Project
- (X) - Level-of-Service Without Project
- [X] - Level-of-Service Existing
- [X] - Overall Level-of-Service

**Unsignalized Intersection Analysis - Weekday Morning Peak Hour**

<table>
<thead>
<tr>
<th>Movement</th>
<th>Level-of-Service</th>
<th>2001 Without Project</th>
<th>2001 With Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waipahu Depot Street with Project Access</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Southbound LT into Project Access</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Westbound LT/RT out of Project Access</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Level-of-Service Results**

Weekday Morning Peak Hour

Figure 8
### Signalized Intersection Analysis - Weekday Afternoon Peak Hour

<table>
<thead>
<tr>
<th>Movement</th>
<th>Level-of Service</th>
<th>2001 Without Project</th>
<th>2001 With Project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Existing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farrington Hwy with Waipahu Depot-St</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastbound LT on Farrington Hwy</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Eastbound TH on Farrington Hwy</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Westbound LT on Farrington Hwy</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Westbound TH/RT on Farrington Hwy</td>
<td>B</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Northbound LT/TH on WDS</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Northbound RT on WDS</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Southbound LT/TH on WDS</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Southbound RT on WDS</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Overall Intersection</td>
<td>B</td>
<td>C</td>
<td>C</td>
</tr>
</tbody>
</table>

### Unsignalized Intersection Analysis - Weekday Afternoon Peak Hour

<table>
<thead>
<tr>
<th>Movement</th>
<th>Level-of Service</th>
<th>2001 Without Project</th>
<th>2001 With Project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Existing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waipahu Depot Street with Project Access</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Southbound LT into Project Access</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Westbound LT/RT out of Project Access</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>

### Legend

- X - Level-of-Service With Project
- (X) - Level-of-Service Without Project
- [X] - Level-of-Service Existing
- \( \times \) - Overall Level-of-Service

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28
general shortage of classroom space at the Police Academy brought about by the need to provide more training as new and modern law enforcement methods are developed.

C. Impacts on Special Management Areas Resources

1. Recreational Resources

The property is neither a shoreline lot nor used for public recreational purposes. There is no public access (or access of any kind) to the shoreline over the subject property.

2. Historic Resources

There are no recorded historic resources on the premises.

3. Scenic and Open Space Resources

The proposed improvements will not affect coastal scenic and open space resources. The ocean cannot be viewed from the Police Academy. The Coastal View Study (Department of Land Utilization, 1987) did not identify any significant stationary view areas across Waipio Peninsula nor is the peninsula considered important coastal land form, an area of important open space or landscape.

4. Coastal Ecosystems

The absence of a diversity of flora and fauna and the improved condition of the site indicates the site does not support valuable coastal ecosystems.

5. Economic Uses

The proposed use will be located on land that has been approved for use as a training facility for the Honolulu Police Department. Although the land on which the Honolulu Police Academy and other public buildings and uses are located is designated agricultural, there are no agricultural or alternative economic uses occurring in the immediate area.

6. Coastal Hazards

The building site and most of the Police Academy is located in Flood Zone D which is defined as areas outside the 500-year flood plain. Tsunami inundation maps place the Police Academy outside areas prone to inundation from coastal waves.

7. Managing Development

This Environmental Assessment has been prepared to communicate potential short- and long-term impacts of the proposed Project on shoreline resources.

The Department of Planning and Permitting has informed the Department of Design and Construction that a Special Management Area Permit (SMP) was previously approved for an enclosed and soundproof firing range for the Police Training Facility in 1976. Therefore, a major SMP will not be required (Comment, Department of Planning and Permitting, 2000).
D. Special Management Area Review Guidelines

The following guidelines are used by the Honolulu City Council or its designated agency for the review of development in the special management area:

a) All development in the special management area shall be subject to reasonable terms and conditions set by the council to ensure that:

1) Adequate access, by dedication or other means, to publicly owned or used beaches, recreation areas and natural reserves is provided to the extent consistent with sound conservation principles;

2) Adequate and properly located public recreation areas and wildlife preserves are reserved;

3) Provisions are made for solid and liquid waste treatment, disposition and management which will minimize adverse effects upon special management areas resources; and

4) Alterations to existing land forms and vegetation, except crops, and construction of structures shall cause minimum adverse effect to water resources and scenic and recreational amenities and minimum danger of floods, landslides, erosion, siltation or failure in the event of earthquakes.

b) No development shall be approved unless the council has first found that:

1) The development will not have any substantial, adverse environmental or ecological effect except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health and safety, or compelling public interest. Such adverse effect shall include, but not be limited to, the potential cumulative impact of individual developments, each one of which taken in itself might not have a substantial adverse effect and the elimination of planning options;

2) The development is consistent with the objectives and policies set forth in Section 25.3.1 and area guidelines contained in HRS Section 205A-26;

3) The development is consistent with the county general plan, development plans and zoning. Such a finding of consistency does not preclude concurrent processing where a development plan amendment or zone change may also be required.

c) The council shall seek to minimize, where reasonable:

1) Dredging, filling or otherwise altering any bay, estuary, salt marsh, river mouth, slough or lagoon;

2) Any development that would reduce the size of any beach or other area suitable for public recreation;

3) Any development which would reduce or impose restrictions upon public access to tidal and submerged lands, beaches, portions of rivers and streams within the special management area and the mean high tide line where there is no beach;
4) Any development which would substantially interfere with or detract from the line of sight toward the sea from the state highway nearest the coast; and

5) Any development which would adversely affect water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land.

Discussion:

The subject property is not a shoreline lot and development will not affect the shoreline, existing public access to the shoreline, or shoreline recreation areas. Dredging or otherwise significant land alterations are not proposed. The structure will not detract or interfere with views of the coastline from the state highway (H-1 Interstate Highway) nearest the coast.

The project is not proposed in an area of open waters, potential fisheries and fishing grounds, and wildlife habitats. The project is consistent with existing and Master Plan land uses approved for the Police Academy.

Wastewater will be discharged into the municipal sewer thus negating potential adverse effects on water quality.

Above ground bullet traps will collect lead bullets and fragments to prevent potential soil and groundwater contamination from lead.

The City and County of Honolulu Central Oahu Development Plan Land Use Map designates TMK: 9-3-02: 09 Public Facility and Preservation. The Public Facility designation applies to portions of the parcel occupied by the Waipahu Incinerator, Honolulu Police Academy, City Tree Nursery, Sewer Pump Station, Waipahu Convenience Center, and the Honolulu Fire Department Maintenance Facility. The land area between Waipahu Depot Street and Kapakahai Stream is designated Preservation. Public uses and structures are a permitted use of P-2 zoned land.

The property is classified Agricultural by the State Land Use Commission and the municipal uses cited above are permitted by State Special Permit. A State Special Permit allows non-agricultural use of land classified Agricultural. The proposed indoor firing range was approved in 1976 as part of the State Special Use Permit allowing construction of the Honolulu Police Academy and its facilities.
SECTION 4 ALTERNATIVES TO THE PROPOSED ACTION

A. No Action

The no action alternative would maintain the status quo of the building site and preclude the occurrence of all environmental impacts, short and long-term, beneficial and adverse described in this Assessment. HPD would continue to use the Koko Head Rifle Range for training and qualification. A no action alternative would not correct the shortcomings experienced by the HPD described in Section 1 of this Assessment.

B. Alternate Sites

The Department of Design and Construction and HPD have not sought alternative sites outside the Police Academy for locating and constructing either an indoor or outdoor firing range. An indoor firing range has been planned to be located at the Police Academy since 1976.

C. Military Ranges

The HPD does not use military ranges for recruit training because of the military’s training schedules and restrictions on the use of their ranges. The military does not have enough range time for their own personnel. Several military police units use the Koko Head Range to qualify their personnel because of their shortage of range time. In addition, the military requires a certified military range safety officer on the range at all times and an ambulance during live fire.

HPD’s Special Services Division, however, uses several training areas at Schofield Army Base, under strict supervision of the military safety officers.
### SECTION 5

**PERMITS AND APPROVALS**

The land use and construction permits and approvals listed below are indicative of rather than a comprehensive listing of all permits that may be required to implement the project.

<table>
<thead>
<tr>
<th>Permit</th>
<th>Authority</th>
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<tbody>
<tr>
<td>Waiver Permit</td>
<td>Department of Planning and Permitting</td>
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<tr>
<td>Grubbing, Grading and Stockpiling</td>
<td>Department of Planning and Permitting</td>
</tr>
<tr>
<td>Building Permit for Building, Electrical, Plumbing</td>
<td>Department of Planning and Permitting</td>
</tr>
<tr>
<td>Sidewalk/Driveway and Demolition Work</td>
<td>Department of Planning and Permitting</td>
</tr>
<tr>
<td>Certificate of Occupancy</td>
<td>Department of Planning and Permitting</td>
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<tr>
<td>Variance from Pollution Controls</td>
<td>Department of Health</td>
</tr>
<tr>
<td>Air Pollution Control</td>
<td>Department of Health</td>
</tr>
</tbody>
</table>
The Draft Environmental Assessment for the Honolulu Police Training Academy Indoor Firing Range was published in the Office of Environmental Quality Control Environmental Notice of May 8, 2000 and May 23, 2000. Publication in the Environmental Notice initiated a 30-day public review period which ended on June 7, 2000. The Draft Environmental Assessment was mailed to agencies and organizations listed below. An asterisk * identifies agencies and organizations that submitted written comments during the review period. All comment letters and responses are found in Appendix A.

Federal
*U.S. Army Corps of Engineers
*U.S. Department of the Interior
  Fish and Wildlife Service

State of Hawaii
*Department of Health
  *Indoor Air Quality and Radiation Branch
  *Office of Environmental Quality Control
Department of Land and Natural Resources
  *Forestry and Wildlife
  *Office of Hawaiian Affairs

City and County of Honolulu
*Board of Water Supply
*Department of Enterprise Services
  Department of Facilities Management
*Department of Parks and Recreation
*Department of Planning and Permitting
*Department of Transportation Services
*Department of Environmental Services
*Fire Department

Others
The Honorable John DeSoto, Honolulu City Council
*GTE Hawaiian Tel
Hawaiian Electric Company
Waipahu Neighborhood Board No. 22
Waipahu Business Association
Waipahu Public Library (Placement)
Chapter 200 (Environmental Impact Statement Rules) of Title 11, Administrative Rules of the State Department of Health, establishes criteria for determining whether an action may have significant effects on the environment (11-200-12). The relationship of the proposed project to these criteria is discussed below.

1) Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;

   There are no natural or cultural resources on the premises to be lost as a result of this project.

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

   The building site is vacant and unused at this time.

3) Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in chapter 344, Hawaii Revised Statutes, and any revisions thereof and amendments thereto, court decisions or executive orders;

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

4) Substantially affects the economic or social welfare of the community or State;

   The proposed project will not result in substantial effects on the economic and social welfare of the community. The project will help the training needs of police recruits (and training recall of in-service officers).  

5) Substantially affects public health;

   Short-term, construction related impacts on air quality and the acoustical environment can be anticipated. The building contractor will comply with applicable public health regulations and measures to mitigate potential adverse impacts.

   The use of lead ammunition increases the potential for exposure to lead, a hazardous substance. In general, the rangemaster and staff who work the range each working day face the highest risk of lead exposure. Rank and file officers using the range on an infrequent basis (semi-annually) should not be affected.

   Exposure to lead in the work environment is regulated by OSHA. HPD will comply with OSHA standards and procedures pertaining to lead and measures for mitigating and treating exposure to lead in the work place.

6) Involves substantial secondary impacts, such as population changes or effects on public facilities,

   Substantial secondary impacts are not anticipated.
7) Involves a substantial degradation of environmental quality;

Environmental quality will not be degraded as a result of this project.

8) Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;

The project is not a precursor for a larger action.

9) Substantially affects a rare, threatened or endangered species, or its habitat;

There are no rare, threatened or endangered flora or fauna on the building site. Pohala Wildlife Sanctuary located about .4 miles to the west of the building site provides habitat for several federally endangered water birds.

10) Detrimentally affects air or water quality or ambient noise levels;

Ambient air quality may be affected by fugitive dust and combustion emissions but can be controlled by measures stipulated in this Assessment. Construction noise will be pronounced during site preparation work but should diminish when the buildings are erected. All construction activities will comply with air quality and noise pollution regulations of the State Department of Health. Best Management Plans will be prepared to minimize construction runoff and erosion.

The ventilation system will collect, filter, and exhaust air outside the building. High efficiency filters can remove 90-99% of airborne dust and smoke, thus, the State of Hawaii clean air standard of for lead emissions which is 0.1 ton/year, is not likely to be exceeded.

11) Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

The building site is not located in an environmentally sensitive area.

12) Substantially affects scenic vistas and viewplanes identified in county or state plans or studies; or,

The indoor firing range will not substantially affect scenic vistas and view planes toward the ocean. Aside from the two-story simulation room, most of the building will be lower in height than most other buildings comprising the Police Academy.

13) Requires substantial energy consumption.

Energy consumption has not been determined.

Based on the above criteria, the proposed Honolulu Police Academy Indoor Firing Range will not result in significant adverse environmental impacts and an Environmental Impact Statement should not be required.
REFERENCES


Department of Land Utilization, City and County of Honolulu. 1986. Land Use Ordinance (As Amended through Ordinance No 97-74).


APPENDIX A

COMMENTS AND RESPONSES
Mr. Gerald Park  
Urban Planner  
1400 Rycroft Street, Suite 876  
Honolulu, Hawai'i 96814-3021

May 2, 2000

Dear Mr. Park:

Subject: Honolulu Police Academy Indoor Firing Range, Wailuku, Ewa District, Oahu, TMK:9-3-02; par. 9

We have reviewed the draft Environmental Assessment and related information as provided by your April 27, 2000, letter to the Department of Land and Natural Resources, Division of Forestry and Wildlife and we have no objections to your proposed construction of an indoor Firing Range at the Honolulu Police Academy. The building will cover 36,974 square feet and be sited within the confines of the Academy. Although, the Pohala Marsh lies to the west of Wai'ale'ale Depot Street and adjacent to the street from the Academy, we do not anticipate any negative impacts to Pohala Marsh as a result of this proposed project.

Thank you for the opportunity to comment on this draft Environmental Assessment for the construction of an Indoor Firing Range located at the Honolulu Police Academy, Wailuku, Ewa District, Oahu.

Sincerely yours,

Michael G. Buck  
Administrator

Copy: DOFAW, Oahu Branch
July 10, 2000

Genevieve Salinas,
Director
Office of Environmental Quality Control
233 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Dear Ms. Salinas:

Subject: Honolulu Police Training Academy Indoor Firing Range

THKE: P-2-02; par. 9

Wai'anae, Wai'anae District, Oahu

Thank you for reviewing the Draft Environmental Assessment prepared for the subject project. We offer the following responses which are numbered in the order presented.

1. Two-sided paper. The Final Environmental Assessment will be printed in duplex format.

2. Technical error. The term "flammable" means unsealed or sealed without a lead jacket. "OC" spray is an acronym for oleoresin capsicum pepper spray. The definitions of both will be included in the Final Environmental Assessment.

3. Hazarous materials:
   a. Studies have not been performed to ascertain whether debris not residents is in the soil. Epidemiological risk studies have not been performed at the site since the Police Training Academy opened in 1988.
   b. The Police Vehicle Maintenance Building (other than facility) is located near the control tower of the airport; several adjacent sites of the proposed indoor firing range. The building is approximately 50 feet from the main entry into the proposed firing range building. The two underground storage tanks referred to in the Environmental Assessment were removed and replaced with new tanks conforming to EPA and State of Hawaii UST standards. The replacement was completed in 1998 and both are in compliance with EPA technical standards and financial responsibility as described in Title 40 CFR Part 280.

4. Comments. Agencies identified in Section 6 of the Draft Environmental Assessment were contacted for information during the pre-consultation phase.

The Draft EA was sent to the Department of Land and Natural Resources, Division of Wildlife and Forestry and the US Department of the Interior, Fish and Wildlife Service, who are working with Ducks Unlimited to restore Poipu Maka. The Draft EA was not intended for Ducks Unlimited. Comments received from both agencies will be included in the Final Environmental Assessment.

Sincerely,

GERALD PARK URBAN PLANNER

Gerald Park

c. C. Kushima, DEE
Mr. Gerald Park
Urban Planner
1400 Rycroft Street, Suite 876
Honolulu, Hawaii 96814-3021

Subject: Draft Environmental Assessment for the Honolulu Police Academy Indoor Firing Range, Waipio, Ewa District, Oahu

Dear Mr. Park,

Thank you for the opportunity to review and comment on the above-referenced document. At this time, the Office of Hawaiian Affairs has no concerns with this project. If you have any questions, please contact Ken N. Silva Cruz, Policy Analyst, at 594-1847.

Sincerely,

Colin C. Kippen, Jr.
Deputy Administrator

cc: Board of Trustees
    Dept. of Design & Construction
    OEQC

MAY 11 2010

Mr. Gerald Park
Gerald Park Urban Planner
1400 Rycroft Street, Suite 876
Honolulu, HI 96814-3021

Subject: Draft Environmental Assessment (DEA) Honolulu Police Academy Indoor Firing Range

Dear Mr. Park:

We have reviewed the subject DEA and have no comments to offer at this time. Should you have any questions, please contact Alex Ito at 523-4150.

Sincerely,

Kenneth H. Sprague
Director
May 11, 2000

Attention: Mr. Gerald Park
GERALD PARK – URBAN PLANNER
1400 Rycroft Street, Suite 876
Honolulu, Hawaii 96813

Dear Mr. Gerald Park:

Subject: DRAFT ENVIRONMENTAL ASSESSMENT
HONOLULU POLICE TRAINING ACADEMY
INDOOR FIRING RANGE
TMH 9-3-82; par. 9

Thank you for the opportunity to review and comment on the Honolulu Police Academy Indoor FIRING RANGE. We have completed our review of the description of the proposed project and maps sent to us with your letter dated April 27, 2000. At this time, we have determined that GTE Hawaiian Telephone Company, Inc. has no conflict with the construction of the planned facility within the area of the proposed project site.

GTE wishes to be a consulted party during the preparation of any future electrical / telecommunication design plans that are produced for this proposed project.

If there are any questions or you require assistance in the future on this project, please call Mahi Tsugawa at 840-5857.

Sincerely,

James Tsugawa
Designer-Access Design
Access Design & Construction

Attachments (2)
May 18, 2000

Mr. Gerald Park
1400 Ryuku Street, Suite E76
Honolulu, Hawaii 96814-3031

Dear Mr. Park:


Thank you for the opportunity to review and comment on the Draft Environmental Assessment for the Honolulu Police Academy Indoor Firing Range project.

We have the following comments to offer:

1. There is an existing 3-inch compound water meter currently serving the proposed project area.
2. The existing water system is presently adequate to accommodate the proposed project.
3. The availability of water will be confirmed when the building permit application is submitted for our review and 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.
4. The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Fire Department.
5. If a three-story or larger project is required, the construction drawings showing the installation of the meter should be submitted for our review and approval.
6. The proposed project is subject to Board of Water Supply cross-connection control requirements prior to the issuance of the building permit application.

If you have any questions, please contact Scott Mezorca at 527-5231.

Very truly yours,

CLIFFORD INAMBLE
Manager and Chief Engineer

May 19, 2000

Mr. Gerald Park
Gerald Park Urban Planner
1400 Ryuku Street, Suite E76
Honolulu, Hawaii 96814-3031

Dear Mr. Park:

Subject: Honolulu Police Academy Indoor Firing Range

We received your letter dated April 27, 2000, regarding the Environmental Assessment for the above-referenced project. We conducted an on-site assessment and have no objections to the proposed project.

Should you have any questions, please call Battalion Chief Kenneth Silva of our Fire Prevention Bureau at 831-7778.

Sincerely,

ATTILIO K. LEONARDI
Fire Chief

AXL/KSL
May 22, 2000

Gerald Park
Gerald Park Urban Planner
1400 Kamehameha Avenue, Suite 870
Honolulu, Hawaii 96814-3021

Dear Mr. Park,

SUBJECT: Honolulu Police Training Academy Indoor Air Firing Range. 7M-3-09: per. 0
Waipio, Ewa District, Oahu

Chapter 11-46, Hawaii Administrative Rules, Community Noise Control regulates excessive noise from stationary sources, and equipment associated with agricultural, construction and industrial activities. An excessive noise source is defined as any stationary source, and any equipment related to agricultural, construction and industrial activity which results in sound in excess of the maximum permissible sound levels specified in sections 11-46-4, as measured at any point at or beyond the property line.

Section 11-46-4(a) states, "General prohibition. Without a permit or variance issued pursuant to section 11-46-7 or 11-46-8, no person within the State shall operate, from any premises or land owned, rented, leased, occupied, or controlled by that person, any excessive noise source."

Community Noise Permits are issued for construction activities which exceed or are anticipated to exceed the established noise standards between the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday and 9:00 a.m. to 6:00 p.m. on Saturdays.

Variances are issued for construction activities which occur outside of the indicated permit hours.

1. The contractor shall obtain a noise permit if the noise levels from the construction activities are expected to exceed the maximum permissible sound levels of the regulations as stated in Section 11-46-6(a).

2. Construction equipment and on-site vehicles requiring an exhaust of gas or air shall be equipped with mufflers as stated in Section 11-46-6(b)(1)(A).

3. The contractor shall comply with the requirements pertaining to construction activities as specified in the rules and the conditions issued with the permit as stated in Section 11-46-7(b)(4).

4. Through facility design, sound levels emanating from the operation of stationary equipment such as cooling towers and emergency generators shall comply with the provisions of Chapter 11-46, Hawaii Administrative Rules, "Community Noise Control."

The subject project for the construction of an indoor firing range for the Honolulu Police Department contains issues regarding possible lead hazards during operation. These exposure hazards involve inhalation of lead dust. The issues of employee safety, health, and disposal of lead contaminated material should be addressed.

The state TSCA Lead program has no comments on this project due to the fact that no lead-based paint will be abated during the project construction or during normal operation.

Chapter 11-39, Hawaii Administrative Rules, Air Conditioning and Ventilating does not have any specific requirements for the exhaust of indoor firing ranges.

We recommend that this project be reviewed by the following state and private agencies:

- DOH Clean Air Branch - Fugitive dust during construction and possible lead emissions through the firing range exhaust.
- DOH Hazardous Waste Program - Potential exposure during collection and disposal of lead contaminated debris.
- DLNR HSHS Program - Employee health and safety and health from lead exposure during operation.
- National Rifle Association – Guidelines for construction/ventilation of indoor firing ranges.

If there are any questions, please contact Mr. Darryl Yamada, Supervising Engineer, Noise Section, Noise, Radiation and Indoor Air Quality Branch at 586-4700.

Sincerely,

Russell S. Takata
Program Manager
Noise, Radiation and IAQ Branch
July 10, 2000
GERALD PARK
Urban Planner
City of Honolulu
Department of Planning
2190 Bachelor Street
Honolulu, Hawaii 96815

Russell S. Takata, Program Manager
Noise, Radiation and IAQ Branch
Department of Health
PO Box 3378
Honolulu, Hawaii 96810

Dear Mr. Takata:

Subject: Honolulu Police Training Academy Indoor Firing Range

TMU 93-02: par. 9
Waipio, Oahu

Thank you for reviewing the Draft Environmental Assessment prepared for the subject project. We offer the following response to your comments.

The environmental assessment described workplace, design, and operational measures that will be taken to minimize police officers’ exposure to lead. Methods and procedures for minimizing human exposure to lead are found in the Occupational Safety and Health Administration (OSHA) standards and procedures of the State Department of Labor and Industrial Relations. The Honolulu Police Department must and will comply with these standards. Examples of OSHA specific protective measures and administrative procedures for minimizing the risk of exposure to lead in the workplace were presented in the environmental assessment.

Through facility design, the ventilation system will collect and filter airborne lead generated by bullets striking the bullet traps and smoke from firing pistons. (Note: The range consultant for the project has indicated that the design and materials used in modern bullet traps can help to reduce airborne lead exposed by bullets striking the trap.) The supply side of the ventilation system will be located in the firing line and the exhaust end beyond the bullet traps at the end of the firing range. Air movement will push airborne emissions down range away from officers on the firing line. High efficiency filters, which can remove 95-99% of airborne dust and smoke, will be used in the exhaust system. It is anticipated that lead-ventilated outside will not exceed the State of Hawaii dust air standard of 0.1 tcu/year.

The bullet traps will be regularly inspected and maintained. Lead bullets and fragments will be collected from collection trays inside the bullet traps and stored in EPA approved containers for disposal by licensed hazardous waste specialists.

Thank you for participating in the environmental review process. Your comments and our responses will be included in the Final Environmental Assessment.

Sincerely,

GERALD PARK URBAN PLANNER

Gerald Park

cc: C. Kushima, DDC
Pouhula Marsh also provides habitat for the following federally protected migratory bird species:

a. Koloa or Pacific golden-plover (Pluvialis fulva)
b. 'Ula'ula or wandering tattler (Heteroscelus incanus)
c. 'Akeake or ruddy turnstone (Arenaria interpres)
d. Kiaea or bristle-thighed curlew (Numenius tahitiensis)

The Service is concerned that the Draft EA did not identify a disposal site for 6,000 cubic yards of excavated materials. Due to the close proximity of Pouhula Marsh to the project, the Service recommends that an approved upland site be identified to ensure that there will be no impacts to the federally protected species that use Pouhula Marsh for habitat. For all other purposes, the Draft EA adequately describes the project’s impacts and includes measures to avoid unnecessary impacts and minimize unavoidable adverse effects.

Provided that the Final EA indicates that excavated materials will be disposed of at an approved upland site, the Service will concur with a determination of Finding of No Significant Impact for the proposed project.

The Service appreciates the opportunity to provide comments on the proposed project. If you have any questions concerning these comments, please contact Fish and Wildlife Biologist, Leila Gibson by telephone at (808) 541-3441 or by facsimile transmission at (808) 541-3470.

Sincerely,

[Signature]
Paul Hansen
Field Supervisor
Ecological Services

cc: Department of Planning and Permitting, Honolulu
July 10, 2000

Paul Hanson, Field Supervisor
Ecological Services
US Department of the Interior
Fish and Wildlife Service
Pacific Islands Ecological Services
300 Ala Moana Boulevard, Room 3-122
Box 5008
Honolulu, Hawaii 96820

Dear Mr. Hanson:

Subject: Hanohalo Police Training Academy Indoor Firing Range

Thank you for reviewing and providing comments on the Draft Environmental Assessment prepared for the subject project. The information about Pueoala Marsh providing habitat for several federally protected bird species and the list the species will be included in the Final Environmental Assessment.

A disposal site for the approximately 4,000 cubic yards of earthwork material on the project site has not yet been identified. No earthwork material will be dumped in Pueoala Marsh and, as you suggest, an approved upland site will be sought. The Department of Design and Construction in consultation with city engineers and the design engineer for the project will identify a disposal site prior to construction.

We thank the Service for participating in the environmental assessment review process.

Sincerely,

Gerald Park
Urban Planner

cc: C. Kihara, DDC
June 1, 2000

Mr. Gerald Park
Gerald Park Urban Planner
1400 Rycroft Street, Suite 876
Honolulu, Hawaii 96814-3021

Dear Mr. Park:

Subject: Honolulu Police Academy Indoor Firing Range
TMK: 6-3-02; sec. 9
WaiPIO, Ewa District, Oahu

Thank you for the opportunity to review and comment on the Draft Environmental Assessment relating to the Honolulu Police Training Academy Indoor Firing Range.

The Department of Parks and Recreation supports the development of this project and concurs with the proposed Finding of No Significant Impact.

Should you have any questions, please contact Mr. John Reid, Planner, at 547-7356.

Sincerely,

WILLIAM D. BALFOUR, JR.
Director

cc: Mr. Don Griffin, Department of Design and Construction

June 5, 2000

Mr. Gerald Park
1400 Rycroft Street
Suite 876
Honolulu, Hawaii 96814-3021

Dear Mr. Park:

Subject: Honolulu Police Academy Indoor Firing Range
TMK: 6-3-02; sec. 9
WaiPIO, Ewa District, Oahu

I have reviewed the Environmental Assessment of the subject project and I do not foresee any adverse impact on the Ted Makaiena Golf Course. I have also attached the comments of the Ted Makaiena Golf Course Superintendent.

If you have any questions, please call me at 733-7383.

Sincerely,

DAVE MILLS
Golf Course System Administrator

CC: C. Kushimaj, DDC
TO:  DAVE MILLS
FROM:  T versa KAGATISHI
SUPERINTENDENT
TED HICKMAN GOLF COURSE
SUBJECT:  POLICE ACADEMY

July 10, 2000

Dave Mills
Golf Course System Administrator
Department of Enterprise Services
City and County of Honolulu
777 Ward Avenue
Honolulu, Hawaii 96814-2166

Dear Mr. Mills:

Subject:  Honolulu Police Academy Indoor Firing Range

TMNC 9-3-99, par. 9

Waipia, Oahu, Hawaii

Thank you for reviewing the Draft Environmental Assessment prepared for the subject project. We offer the following response to the comment offered by Ms. Nagamoto.

The indoor firing range will be an enclosed structure. There are, however, three openings—a fire exit and two doorways—proposed on the side of the building facing the Ted Hickman Golf Course. A fire exit will be located on the ground floor of the two-story building and will not be used as an entry into the building (the entry is located on the opposite side of the fire exit). One doorway is located at the head of the firing range and the other at the end of the firing range. These doors are intended to facilitate the movement of range supplies and materials in and out of the firing range and to access the bullet traps for removal of spent ammunition. The two doors will be covered with built-up insulation and closed during firing. It is anticipated that the enclosed structure coupled with a minimal number of openings on the side of the Ted Hickman Golf Course will hold noise to a minimum and should not adversely affect the golf course holes adjoining the Police Academy.

Thank you for participating in the environmental assessment review process.

Sincerely,

GERALD PARK URBAN PLANNER

Gerald Park

cc:  C. Kurokawa, DDC
Mr. Gerald Park  
1400 Mycroft Street, Suite 876  
Honolulu, Hawaii 96814  

Dear Mr. Park:  

Draft Environmental Assessment (DEA)  
Honolulu Police Training Academy  
Indoor Firing Range  
65 Waipahu Depot Street - Ewa  

We have reviewed the DEA submitted on April 28, 2000 for the indoor firing range at the above site and offer the following comments:  

General Information  

1. The summary section should describe the anticipated determination (as a OSU anticipated).  
2. The contact person's department should be corrected to the Department of Design and Construction instead of the Department of Planning and Permitting (DPP).  
3. According to the Flood Insurance Rate Map (FIRM) Community-Panel No. 150092 Ohio D (Revised 9/20/95) the project site is within Flood zones AE, X, D and X. The discussion on the flood hazard districts should be updated to reflect the revised information.  
4. In Section 6, the DPP should be added to the list of agencies consulted.  

Special Management Area Use Permit (SMAP)  

The project site is within the Special Management Area (SMA). However, an enclosed and soundproofed firing range was approved under 76/SM-22 for the Police Training Facility. Therefore, a major SMAP will not be required. Any modification to the project, approved under 76/SM-22, will be reviewed when building permit plans are submitted for review and approval.  

State Special Use Permit (SUP)  

The approved Special Use Permit No. 76/SUP-3, Appendix A, describes the then-proposed enclosed and soundproofed firing range as a low one-story structure. The current proposal is for a one-story structure about 20 feet high, with two 2-story rooms about 36 feet in height. The SUP allows the Director to make minor modifications to the project. Therefore, the DPP will review and consider approval of the proposed modification at the time of building permit application.  

Land Use Ordinance  

The project site is within the P-2 General Preservation District. Within the P-2 district, the maximum building area is 3 percent of the zoning lot and the maximum height is 25 feet (if height setbacks are provided). The proposed 38,100-square foot, 36 foot high, building will require a waiver from these standards.  

Should you have any questions please contact Lynn Fauer of our staff at 927-6278.  

Sincerely yours,  

[Signature]  

RANDALL K. FUKUI, AIA  
Director of Planning and Permitting  

DEPARTMENT OF PLANNING AND PERMITTING  
CITY AND COUNTY OF HONOLULU  
2000/CLUD-2670(1k)  
76/SUP-3  
76/SM-22  
June 6, 2000  

Mr. Gerald Park  
Page 2  
June 6, 2000
Mr. Gerald Park  
Gerald Park Urban Planner  
1400 Rycroft Street, Suite 876  
Honolulu, Hawaii 96814-3021

Dear Mr. Park:

Subject: Draft Environmental Assessment (DEA)  
Honolulu Police Training Academy Indoor Firing Range  
Waipio, Ewa, Oahu  
Texas 9-3-02:por. of 9

Thank you for allowing us to review and comment on the subject project. We have the following comments to offer:

Noise Concerns

Without a permit or variance issued pursuant to Chapter 11-46, "Community Noise Control," no person within the State shall operate any process or any excessive noise source, which is defined as any stationary source which emits sound in excess of the maximum permissible sound levels specified in Section 11-46-4, as measured at any point at or beyond the property line.

Through facility design, sound levels emanating from stationary equipment such as air conditioning systems, exhaust fans, refrigeration compressors or generators must be attenuated to comply with the provisions of the Department of Health's Administrative Rules, Chapter 11-46, "Community Noise Control."

Sincerely,

[Signature]

Deputy Director  
Environmental Health Administration

c: MRIAQ

July 3, 2000  
TPD600-02099R

Mr. Gerald Park  
Gerald Park Urban Planner  
1400 Rycroft Street, Suite 876  
Honolulu, Hawaii 96814-3021

Dear Mr. Park:

Subject: Honolulu Police Academy Indoor Firing Range

In response to your April 27, 2000 letter, the draft environmental assessment for the subject project was reviewed. Based on the information provided, the traffic generated by the project should have minimal adverse impact on the City streets in the area, specifically Waipahu Depot Street.

Should you have any questions regarding this matter, please contact Faith Miyamoto of the Transportation Planning Division at 327-0970.

Sincerely,

[Signature]

CHERYL D. SOON  
Director