February 1, 2002

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

Dear Ms. Salmonson:

RE: Finding of No Significant Impact (FONSI) for Artesian Vista, TMK 2-8-002:032, Honolulu, Hawaii

The Housing and Community Development Corporation of Hawaii has reviewed the comments received during the 30-day public comment period which began on November 8, 2001. The agency has determined that this project will not have significant environmental effects and has issued a FONSI. Please publish this notice in the February 23, 2002 OEQC Environmental Notice.

We have enclosed a completed OEQC Publication Form and four copies of the final EA. Please call Dean Sakata at 587-0576, Lloyd Fukuoka at 587-0579 or Lisa Wond at 587-0569 if you have any questions.

Sincerely,

[Signature]

SHARYN L. MIYASHIRO
Executive Director

LW:dp

Enc.

c: Kusao & Kurahashi, Inc., Planning & Zoning Consultants
    Gary Furuta, Hawaii Housing Development Corporation
FINAL
ENVIRONMENTAL ASSESSMENT

ARTESIAN VISTA
AFFORDABLE ELDERLY RENTAL
APARTMENT DEVELOPMENT
Honolulu, Oahu, Hawaii
TMK: 2-8-002: 032

HAWAII HOUSING DEVELOPMENT CORPORATION
Randolph G. Moore, Board Chair
Gary S. Furuta, Project Manager
Imperial Plaza, Suite C-103
725 Kapiolani Boulevard
Honolulu, Hawaii 96813

APPLICANT

Kusao & Kurahashi, Inc.
Planning and Zoning Consultants
Manoa Market Place
2752 Woodlawn Drive, Suite 5-202
Honolulu, Hawaii 96822

AGENT

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AGENT

FEBRUARY 2002
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FINAL
ENVIRONMENTAL ASSESSMENT

ARTESIAN VISTA
AFFORDABLE ELDERLY RENTAL
APARTMENT DEVELOPMENT
Oahu, Hawaii
TMK: 2-8-002: 32

I. INTRODUCTION

The applicant, Hawaii Housing Development Corporation, proposes to develop an eight-story elderly affordable rental apartment building in accordance with the requirements of Chapter 201G of the Hawaii Revised Statutes (HRS), as amended. The eight-story building will provide 53 1-bedroom affordable rental units and one resident manager's unit, 23 at grade parking stalls, one of which will be an accessible stall, and one loading stall, for elderly residents (62 and older) who earn at or below 30% and 50% of the area median income (AMI). This Draft Environmental Assessment Report for the development of this multi-story affordable rental apartment building is prepared pursuant to and in accordance with the requirements of Chapter 343 HRS and Chapter 200 of Title 11, Administrative Rules - Environmental Impact Statement Rules. The action that triggers this assessment is the proposed development at 1828 Young Street, Honolulu, Hawaii, as shown on Exhibit 1, Location and Zoning Map, and the possible use of State and City funds for the project.

The proposed elderly affordable apartment use is permitted in the AMX-2 Apartment Mixed Use District of Honolulu under the Land Use Ordinance (Section 7.80-4).
The 10,790 square foot vacant property at 1828 Young Street is located on the corner of Artesian Street and Young Street. The property is bounded by a mixture of residential and commercial operations to the north. ABC Auto Body and Paint Company is separated to the north by a single family residence. Adjacent to the ABC Auto Body and Paint Company is a dental office building fronting Beretania Street. To the South, across Young Street is a three (3) story apartment building and a two (2) story office building. To the West, across Artesian Street is a single family residence, a three (3) story commercial building, and the Artesian Plaza, a six (6) story office building fronting Beretania Street. To the East are a mixture of single family homes and a two story walk up apartment building.

II. GENERAL INFORMATION

A. Developer/Applicant : Hawaii Housing Development Corp.
725 Kapiolani Blvd., Suite C-103
Honolulu, Hawaii 96813
Randolph G. Moore, Board Chair
Gary S. Furuta, Project Manager

B. Recorded Fee Owner : Olivet Baptist Church
1775 S. Beretania Street
Honolulu, Hawaii
(Hawaii Housing Development Corporation has an option to purchase)

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D. Tax Map Key : 2-8-02: 032

E. Agent : Kusao & Kurahashi, Inc.
Planning and Zoning Consultants
2752 Woodlawn Drive, Suite 5-202
Honolulu, Hawaii 96822

F. Location : 1828 Young Street in Honolulu, Hawaii (Exhibit 1)

G. Lot Area : 10,790 square feet

H. Zoning : AMX-2 Apartment Mixed Use District
(Exhibit 1)

I. State Land Use : Urban

J. Development Plan Land Use Map : Residential Emphasis Mixed Use
(Exhibit 2)

Public Facilities Map : No improvements affecting this site appear on the map, however there is a planned seven-foot street frontage improvement on Young Street and Artesian Street (Exhibit 3)

K. Special District : Not in Special District

L. Existing Use : Vacant

M. List of Agencies Consulted: Board of Water Supply
Department of Planning and Permitting
OEQC
Fire Department

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III. DESCRIPTION OF PROPOSED ACTION

A. General Description

1. Proposed Development

The proposed development will provide rental units affordable to elderly residents (62 years of age and older) who earn at or below 30% and 50% of the area median income (AMI). The concept of aging in place will be promoted by this development and seniors will be able to enjoy the company of friends and neighbors until age and/or illness place them in a position of 24-hour care that is provided by long term care facilities. The project also hopes to provide a service similar to an assisted living component that will be offered on an "as needed basis" to minimize the maintenance cost for individual residents of the complex. Our project planned for seniors in the low income category will try to minimize maintenance cost by developing individual programs of assistance for the seniors as they need it. The applicant is working with the Catholic
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Charities of the Diocese of Honolulu and more specifically with its Elderly Services group to come to an agreement on the services that they will provide. The purpose of providing these services, on a non-denominational basis, is to help the individuals to manage living in their own apartments and community environment for as long as possible and as independently as possible.

The proposed eight story Artesian Vista apartments will consist of 54 one-bedroom units, one of which will be the resident manager’s apartment. Three of the apartment units will be handicapped accessible with all other units adaptable. There will be 23 at-grade parking stalls, one of which will be an accessible stall. Five of the parking stalls will be marked as visitor stalls. In addition to the 23 parking stalls a van accessible loading stall will be available with ingress and egress via Artesian Street, as indicated in the plans provided in Appendix I. The apartment units will range from 404 square feet to 417 square feet in size. Fifty three (53) of the units are intended as affordable to elderly residents 62 years of age and older. The remaining unit is intended for use as the resident manager’s apartment. In addition to the apartment units, the development will include a Manager’s Office, and the Mechanical and Electrical Room adjacent to the entry lobby on the ground floor.
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A Multi-Purpose Room with kitchen and bathroom will be located on the 2nd floor. A laundry room will be available on each floor near the elevator lobby.

A total open space area of approximately 949 square feet (347 square feet of victory garden and 602 square feet of private park and picnic area) will be located fronting Young and Artesian Streets. The concept of a Victory Garden has been used successfully in similar elderly rental projects built by this developer. Within the Victory Garden, garden plots will be set up as needed to allow the elderly residents to enjoy gardening and the growing of various types of vegetables, fruit and/or ornamental plants. The well-being of the elderly residents’ can be greatly enhanced in this effort, through their physical effort in caring for the growing plants and the social interaction that would take place with their neighboring gardeners. Resting benches will be located within other areas of the landscaped open spaces.

The building will have a front yard setback of the required 10 feet along Young Street and Artesian Street with an additional 7 feet being allowed for the future Young Street and Artesian Street frontage improvements. An attractive walk-way from Young Street to the main entryway, enhanced with tropical landscaping, shade trees and resting benches will provide a
pleasant ambiance. A 14-foot setback at the south west corner will allow for the installation of a 36 inch Hawaiian Electric transformer that requires a 4-foot clearance. No landscaping is allowed to block access to the transformer. However, being conscious of the aesthetics the architect has allowed for a portion of the victory garden and two of the proposed canopy trees on Young Street to help minimize the visual impact. The landscape treatment for the Artesian Vista Apartments will consist of eight (8) medium canopy trees in the planting areas along Young and Artesian Streets to minimize the visual impact of the structure. Two (2) additional medium canopy trees will be located within the parking area, near the west side of the property. Five (5) palm trees are planned for the north end of the property, with ground cover and lawn in appropriate locations within the open space of the property. A minimum 2-foot hedge is planned along the property line on Young and Artesian Streets to help screen surface parking, the loading area, and to give privacy to residents resting or socializing within the open areas. The irrigation system will be connected to an existing water line that is designed to provide adequate water coverage to all planting areas. Reclaimed water will not be used for landscaping. The new automatic irrigation system will consist of spray heads and drip emitters. The landscape sprinkler system will be divided
into zones, meaning, separate watering schedules in order to
conserve and better manage our water supply.

2. Location

The 10,790 square foot vacant property is located at 1828
Young Street, bounded by Young Street to the South and
Artesian Street to the East. Immediately North of the property
is a single family home and to the West of the project site is a
single family home and a single story commercial building. The
project site is located on the corner of Young Street and Artesian
Street. Young Street runs parallel between the major arterials of
King Street to the south and Beretania Street to the North. It is
located within the McCully neighborhood in the
McCully/Moiliili Neighborhood Board District.

3. Surrounding Area

The project site is centrally located in the Primary Urban
Center of Honolulu. The surrounding area is developed with a
mix of commercial, residential and apartment uses. Also in the
greater surrounding area are public uses, industrial uses,
churches and parks. The property is located within the
McCully/Moiliili Neighborhood Board District. Numerous small
businesses are in the area, as well as market and affordable
residential rental apartments. Times Supermarket is located on
South King Street and Young Street, one block south west of the
subject property.

The proposed rental apartment use of the site is a permitted use that is compatible with the surrounding uses.

The site fronts Young Street in the block between Artesian Street and Pawaa Lane.

The project site proposed for the elderly rental apartment development is vacant and no residents or businesses will be displaced by this project. The proposed elderly rental apartment is compatible with the surrounding condominium and apartment uses.

4. Land Use Approvals
   a. State Land Use

      The project site is designated Urban under state land use and the proposed affordable rental apartment development is consistent with this designation.

   b. Development Plan

      The project site is planned for Residential Emphasis Mixed Use on the Development Plan Land Use Map. The proposed elderly affordable rental apartment development will conform to this designation.

      No improvements affecting this site appear on the Development Plan Land Use Map, however there is a planned seven-foot street frontage improvements planned
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on Young Street and Artesian Street. The applicant is providing the 7-foot widening setback and the required 10-foot yard setback.

c. Zoning

The project site is zoned AMX-2 Medium Density Apartment District. The proposed affordable rental apartment use is consistent with this zoning district. In order to accommodate the provision of 100% of the units at affordable rates, the applicant will be requesting exemptions from certain design standards of the AMX-2 Medium Density Apartment District in the processing of the Chapter 201G, HRS, permit application.

B. Technical Characteristics

1. Use Characteristics

The applicant will provide all 53 rental apartment units (100%), to those residents 62 years and older who fall within 30% and 50% of the area median income (AMI). The additional one-bedroom unit, that makes up the 54-units, will be used by the resident manager.

The proposed rental rates are as follows: Six (6) units within the proposed development will be rented at the 30% and below AMI levels. The initial gross rent for these apartments will be $313.00 per month, $50.00 per month less than HUD's
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maximum of $363.00 per month. Forty seven (47) units within the proposed development will be rented at the 50% and below AMI levels, with an initial gross rent of $551.00 per month. This rent is $54.00 per month below HUD’s current maximum gross of $605.00 per month for this income level.

Additional uses within the development will include a Manager’s Office, and the Mechanical and Electrical Room adjacent to the ground floor lobby. A Multi-Purpose Room with bathrooms will be located on the 2nd floor. Laundry rooms will be located on all floors.

2. Physical Characteristics

The proposed development will include a new 8-story concrete building consisting of 54 1-bedroom units, 23 at grade parking stalls that includes one accessible stall, and one van accessible loading stall. Five parking stalls will be marked as visitor stalls. A rendering, site plan, floor plans and elevation plans of the 8-story elderly affordable rental apartment building are provided in Appendix I.

The project involves development of a 54 one-bedroom rental unit project. Fifty three (53) of the units will be affordable to elderly residents 62 years of age and older. The remaining unit is intended as the resident manager’s apartment. In addition to the apartment units, the development will include a Manager’s Office, and the Mechanical and Electrical Room on
the ground floor. A Multi-Purpose Room with adjoining bathroom will be located on the 2nd floor. A laundry room will be located on all floors.

The apartment building will be designed to incorporate energy saving light fixtures, energy efficient split system air conditioning, energy efficient hot water heaters, and low flow plumbing fixtures. In addition, the building envelope meets the State energy code, and xeriscape landscaping will be incorporated within the landscape plan for the project.

The elderly affordable rental apartment building, with a finished height of approximately 72'-6" will be well below the maximum height limit of 150' for this AMX-2 Apartment Mixed Use District.

Access to the project site will be via Artesian Street, with two separate driveways facilitating easy access to and from the building and parking spaces. A separate walkway entrance to the Lobby will be directly off Young Street. The development will include one loading zone as required by the Land Use Ordinance (LUO). The at-grade parking will contain 23 parking spaces of which one will be an accessible stall.

A total of approximately 949 square feet of open space area will be provided on the project site, 347 square feet of which will be dedicated as a Victory Garden and the remaining
602 square feet for a Private Park and Picnic Area, for use by the residents. The concept of a victory garden has been used successfully in similar elderly rental projects built by this developer. The well-being of the elderly residents can be greatly enhanced by offering them the amenities of such a garden. A multi-purpose room of 828.4 square feet will also be provided on the 2nd floor for socialization and recreational activities, in addition to other uses.

The landscape treatment for the Artesian Vista Apartments will consist of eight (8) medium canopy trees fronting Young Street and Artesian Street. Two (2) more medium canopy trees will be located within the parking lot and five (5) palm trees are planned to be located along the north property line. Lawn and ground cover will be located in appropriate locations within the open areas. Please refer to Appendix 1 - Site Plans and Landscape Plan. An ever-green hedge is planned along Young Street and Artesian Street to screen surface parking and the loading area and also to give privacy to tenants socializing in the nearby open lawn area. Within the Victory Garden, garden plots will be set up as needed to allow the elderly residents to enjoy gardening and the growing of various types of vegetables, fruit and/or ornamental plants. The well being of the elderly residents will be greatly enhanced in this effort, through their
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physical effort in caring for the growing plants and the social interaction that would take place with their neighboring gardeners.

The total floor area for the project will be approximately 30,998 square feet, with each 1-bedroom unit consisting of approximately 404 to 417 square feet. The ground floor lobby, managers office, electrical room, pump room, etc. will consist of approximately 912 square feet. The multi-purpose room on the 2nd floor will measure approximately 828.4 square feet in addition to the adjoining bathrooms and laundry room.

3. Construction Characteristics.

   The project will be constructed over a one-year period. Construction will begin as soon as the applicant is able to receive approval of the project by the City, including building permit approvals.

   The project will be built at or near existing grade. Excavation for the project should be limited to the footings and foundation of the structure.

   Dust control measures appropriate to the situation will be employed by the contractor, including where appropriate, the use of water wagons, erection of dust barriers and other methods for minimizing dust.
A. Demographic Impacts

1. Residential Population

The project will provide 53 1-bedroom affordable rental apartment units, and one resident manager’s unit. These units could support a resident population of 54 or more.

The General Plan Population Guidelines establish a population range for the Primary Urban Center Development Plan Area for the Year 2010 of between 450,800 and 497,800 persons. In 1990 the actual population for the Primary Urban Center was 432,023. The additional population supported by this development will help the Primary Urban Center in reaching the population range planned in the Year 2010.

Data@Work, Inc. a market research firm that specializes in analyzing residential real estate markets for developers, has been retained by the Hawaii Housing Development Corporation, General Partner of Artesian Vista L.P., to perform a study analyzing the market for affordable senior rental in Honolulu. The market study dated March 26, 2001, and titled, “Artesian Vista Affordable Senior Housing Market Study”, and focuses on the historical, current, and projected rental market conditions and trends to help forecast the absorption for the proposed project.

"........Overall, the economic and residential real estate
conditions were shown to be creating the kind of demand that would be favorable to the kinds of units proposed by the subject project. In general it appears we are entering a market characterized by low supply and growing demand.

Taking demand first, Oahu's overall rental market shows signs of bottoming out, with upward pressure on rental rate noticeable in several neighborhoods, including those surrounding the proposed project. There are wait lists in places for senior rental units, and the present inventory is almost 100% occupied, again with wait lists. In addition, an examination of the projected growth in the number of households in the targeted market was performed and it was shown that demand, both potential and 'effective' should be more than sufficient to absorb the number of proposed units.

On the supply side, the tight market conditions prevailing in existing senior affordable rental projects were noted. In addition, an examination of future supply was made and we concluded there are few projects in the works that target either the general rental market demand, or the specific target market demand (senior affordable rental demand). We concluded that neither current nor future supply does not appear sufficient to absorb significantly the current and projected demand in this market.
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Given these indicators, the project should be able to achieve similar rental rates of other affordable rental projects ($510 at Royal Kinau to $726 at Kulana Hale) and achieve a rapid absorption. The developer can anticipate between 100 and 300 applications within six to twelve months after marketing is commenced. Of those, the developer should be able to convert enough to be able to reach final occupancy within a six to twelve month period after the project has been completed.

2. Visitor Population

The project will have no impact on the visitor population.

3. Character or Culture of the Neighborhood

Located in an urban setting the site is vacant. The site is surrounded by condominiums, apartment structures and numerous small commercial buildings.

The proposed rental apartment use of the site is in keeping with the existing character of this mixed use neighborhood and is compatible with the surrounding condominium and apartment uses.

4. Displacement

The site proposed for the rental apartment development is vacant and no residents or businesses will be displaced by this project.
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B. Economic Impacts

1. Economic Growth

   As a rental apartment development it will have primarily a secondary effect on economic growth by providing short-term construction jobs and possibly a demand for service industry jobs to support the population increase. The project will also provide a limited amount of long-term, full time employment for a resident manager, and a maintenance person.

2. Employment

   As mentioned earlier the project will provide short-term construction jobs and a few long-term jobs in the form of a resident manager and a maintenance person. The development will also benefit existing service contractors, e.g. elevator maintenance, security, alarm, etc.

3. Government Revenues/Taxes

   Tax revenues will be generated by the short-term construction work and also modest revenues by the long-term employment and secondary service industry jobs that support the increase in population.

   The fee exemptions requested in the 201G application to the City and County of Honolulu are as follows:

   a. Building Permit Fee - Approx. $21,000
   b. Real Property Tax - $30,000/yr.
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c. GE project development - $300,000
d. GE operation expense - $13,000/yr.

C. Housing Impacts

1. Increase Supply

Fifty four (54) affordable rental apartment units are planned for this development (one of the units will be used by the resident manager) and will increase the number of affordable rental units available to elderly residents in the McCully/Moiliili neighborhoods of Honolulu.

2. Affordable Units

The applicant proposes that 100% of the available rental apartment units will be affordable to those 62 years and older, who fall within the category of 30% and 50% of the area median income (AMI).

D. Public Services

1. Access and Transportation

Access to the project site will be via Artesian Street, with two separate driveways facilitating easy access to the parking spaces, loading space and lobby entrance.

The proposed expansion may involve some short term construction disruption of traffic for transportation of construction equipment to and from the site and delivery of building materials to the site. The delays are normally of short
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duration and will end when the construction is completed.


The TIAR section “Conclusion and Recommendations” stated as follows:

“The Artesian Vista Apartments Project, when completed in the year 2003, would not affect the Level-of-Service (LOS) at the existing study intersection of Young and Artesian Street during the weekday commuter hours. No capacity mitigating actions are required due to the proposed project. A parking analysis show that the 23 parking spaces provided as part of the Artesian Vista Apartments should be adequate for the intended use as an elderly rental facility.”

Under Roadway Facilities the Traffic Study further states:

“Young Street is a two-lane road which runs from Victoria Street near Thomas Square to Isenberg Street near Moiliili Field. Young Street runs in a parallel path between two
major arterials, Beretania Street and South King Street. The major intersections along this street are signalized. On-street parking is generally allowed throughout during all times of the day. The posted speed limit is 25 miles per hour (mph). Young Street services a variety of mostly commercial land uses via numerous driveways. Artesian Street is a short two-way road between Bingham Street and South King Street."

The standard three-step procedure of trip generation, trip distribution and traffic assignment was used to estimate peak hour traffic from the proposed project.

Trip generation for the proposed project was determined based on the project land uses and trip rate data from the ITE Trip Generation Report by the Institute of Transportation Engineers, Sixth Edition, 1997. The project site trip generation count for the proposed 54-unit elderly apartment is as follows: morning entry = 3, morning exit = 1; afternoon entry = 3, afternoon exit = 2.

Parking generation was determined based on the project land uses and data from the ITE Parking Generation Report. The parking generation rate is the number of occupied parking spaces per one unit of independent variable. The average parking generation rate on a weekday for a retirement
community is 0.27 occupied stalls per dwelling unit which includes parking generated by residents, visitors and service personnel. Therefore, using this rate with 54 occupied units gives an estimated peak parking load of 15 stalls.

We are requesting an exemption from the number of parking stalls required by the Land Use Ordinance, based on an analysis of the projected parking generation provided by our traffic consultant, Pacific Planning and Engineering, Inc. This analysis included an estimated peak parking load of 15 stalls, based on the ITE Parking Generation Report and a table of parking provided at similar urban elderly housing developments in Honolulu. Our 23 parking stalls is significantly greater than the projected peak parking load of 15.

To further support the adequacy of 23 parking stalls to accommodate the parking demands projected for Artesian Vista, please refer to table prepared by the former Department of Housing and Community Development on page 17 of the Traffic Impact Assessment Report - Appendix II. This table indicates that the average parking ratio for tenant parking requirements is about 1 stall per 5 units in urban elderly housing projects. Our project may enjoy an even lower parking demand when developed because the affordable income group that this project will support is the group earning 30% and 50% below annual
median income (AMI). For a family of one in the at or below 30% AMI, the income limit is $13,550.00 and for a family of two it is $15,500.00. For a family of one in the at or below 50% AMI, the income limit is $22,600.00, and for a family of two it is $25,850.00. With the advanced age of each resident and the limited income, the cost of maintaining and up-keeping a car, in addition to other living expenses, such as rent, food and clothing may be cost prohibitive.

Other factors which, in this project, will minimize the need for vehicles for elderly residents is its convenient location to major bus lines on Beretania Street and King Street; the many restaurants, small stores, banks and doctor's offices close by; and its proximity to Times Super Market just a very short walk away on King Street.

In summary, it is projected that the proposed 54-unit rental apartment development will have minimal impact on traffic since it is anticipated that the majority of the elderly residents will not be driving. The 23 parking stalls should be more than adequate to support the proposed apartment units.

Bus transportation servicing the project site travels along Beretania Street and King Street. A discussion on accessible pedestrian paths, along Artesian, Beretania and King Streets, to and from the bus stops is as follows: When developed all
roadway improvements including sidewalks will be provided on the frontage (Young Street and Artesian Street) of the subject property. On both sides of Artesian Street, between Young Street and Beretania Street (upon completion of the project) there will be sidewalks except for short breaks fronting the ABC Auto Body and Paint Company on the ewa side and a residence on the kokohead side, where pedestrians will have to travel over a grassed or graveled pathway. On both sides of Artesian, between Young Street and King Street there are a mixture of sidewalks and grassed or graveled pathways. The kokohead side of Artesian Street, at his location, has a grassed or graveled pathway between Young Street and King Street. The ewa side of Artesian Street, at this location, has an existing sidewalk starting at the corner of Young and Artesian Street extending approximately 1/3 of the way down Artesian Street to King Street. The remainder of the way down to King Street is a mixture of grassed and gravel pathway.

In addition to an accessible stall within the parking lot, a van accessible loading space will be provided. Please refer to Site and Ground Floor Plans in Appendix I. The Handi-Van vehicle will pickup/drop-off at the curbside of Young Street.

2. Water

The Honolulu Board of Water Supply (BWS) currently
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Artesian Vista An Affordable Elderly Rental Development

provides potable water for the project site via an existing 8-inch water line in Young Street or an existing 12-inch water line in Artesian Street. No off-site water improvements are needed to service the proposed development.

The design of the project will incorporate water efficient toilet fixtures, low flow shower heads and sink faucets, for water conservation.

The existing water system is adequate to accommodate the proposed apartment building, according to a BWS letter (Appendix III, Agency Comments) dated February 2, 2001.

The average daily water consumption (demand) per day for the 54-unit apartment building will be approximately 10,800 gallons per day, based on an assumption of 2 persons per unit and an average of 100 gallons per day per person of domestic water consumption. Additional water used for irrigation of landscaping and ground maintenance is considered to be minimal.

3. Wastewater

The average daily wastewater flow expected to be discharged by the proposed development is estimated to be approximately 8,640 gallons per day based on the proposed rental apartment use. Wastewater calculations assumes 54 units, 2 persons per unit with an average of 80 gallons per day per
person of wastewater flow.

Municipal wastewater service for the area is provided by a 6" wastewater transmission line on Artesian Street.

4. Drainage

The existing topography is flat with a slight slope in the Mauka direction. It is a vacant lot covered with asphalt pavement with some patched areas. The parcel has street frontage on Young Street and Artesian Street. The streets are improved and a 7-foot setback along Young Street and Artesian Street is being allowed for future City street frontage improvements, in addition to the required 10-foot setback. No off-site drainage system currently exists, and the developer will maintain the existing drainage pattern currently existing on the site. The proposed development may reduce runoff from the project site since the proposed development will introduce landscaping that is presently non-existent.

Design of onsite drainage systems will comply with "Rules Relating to Storm Drainage Standards, Department of Planning and Permitting, City and County of Honolulu, 2000". The applicant will also employ best management practices (BMP's) to control and reduce the discharge of pollutants during the construction of the Artesian Vista apartments.

On site drainage systems will be designed to accommodate
a storm with a 10-year recurrence interval. Storm water runoff from a 10-year storm will be approximately 2 cubic feet per second for the existing and with project conditions.

The project site is in Zone X, an area determined to be outside the 500 year flood plain.

5. Solid Waste Disposal
   
The solid waste generated by the proposed expansion will be collected by a private refuse firm and will not impact municipal refuse services.

6. Schools
   
The proposed elderly affordable rental development will not impact the local school system.

7. Parks
   
Washington Intermediate School is approximately 500 feet away from the project site and provides play ground and recreational areas in close proximity to the project site. The Stadium Park is approximately 1,900 feet away from the project site, and a small neighborhood park is located approximately 1000 feet away on Pumehana Street.

8. Police
   
The project site will be serviced by patrol officers from District #7, stationed at the Alapai Headquarter's Building.
9. Fire

The Pawaa Fire Station #2 on Makaloa Street is located approximately 2,800 feet from the project site and will provide primary response in case of an emergency.

10. Utilities

a. Electric

The Hawaiian Electric Company has existing power lines serving this area and the applicant will coordinate development of the project to insure that the power lines will be adequate to support the proposed rental apartment development.

b. Telephone

Verizon formally GTE Hawaiian Telephone Company has existing utility service lines in the area. It is expected that these existing lines will be used to service this proposed apartment development. Development of the project will be coordinated with Verizon to determine if new lines will be required.

c. Others

Cable television presently services other buildings in the surrounding area and arrangements will be made with the appropriate firms to provide cable service to this rental apartment as well.
E. Environmental Impacts

1. Historical and Archaeological Resources

The project site has been in urban use for many years and a number of different uses and buildings have existed on the two lots. Because the site has been extensively developed with no previous record of historic or archaeological discoveries, the proposed development is not expected to have an impact on archaeological resources.

Although it does not appear that the project will impact on any historic sites, the applicant will instruct his contractor (earthwork) to immediately stop work and contact the State Historic Preservation Division (SHPD) for review and approval of proposed mitigation measures should any previously unidentified historic sites (including but not limited to artifacts, shell, bone, or charcoal deposits, human burials, rock or coral alignments, pavings or walls) be encountered during the development of the project approved under this Environmental Assessment. Work in the immediate area shall be stopped until SHPD is able to assess impacts and make further recommendations for appropriate mitigation measures.

2. Natural Resources

a. Water Resources

The Ala Wai Canal is located approximately 2,600
linear feet makai (south) of the subject lot. The project will have no significant effect on this body of water.

b. Flood Plain Management

The project site is in Zone X, area determined to be outside 500-year flood plain.

c. Wetlands Protection

The project site is an urbanized lot that contains no wetlands.

d. Coastal Zone Management

The project site is not within the coastal zone management area or the City's Special Management Area.

e. Unique Natural Features

The project site is level with soil suitable to support urban development as can be seen from other high rise structures on nearby lots. There are no unique features such as sand dunes or sloped areas where erosion would be a concern.

f. Flora and Fauna

This urbanized site does not contain any wildlife habitats or rare or endangered flora or fauna.

g. Agricultural Lands

The project site is in an urban area where its use will not impact agricultural lands or lands with the
Artesian Vista An Affordable Elderly Rental Development

potential for agricultural use.

h. Open Space

The project site although presently vacant is zoned AMX-2 Apartment Mixed Use District. The project is situated in an urbanized and developed area and development of this site will not affect any important open space features in the area.

F. Topography

The subject site is a level, vacant lot, located in an urban setting.

G. Soils

The U.S. Department of Agriculture Soil Conservation Service Soil Survey Report for the Island of Oahu classifies the soils for this area as Makiki Series (MkA). This series consists of well-drain soils on alluvial fans and terraces in the city of Honolulu. They are nearly level. Elevations range from 20 to 200 feet. The annual rainfall amounts to 30 to 60 inches. Most of it falls between November and April. The mean annual soil temperature is 73 degrees F. Makiki soils are geographically associated with Kaena and Tantalus soils. These soils are used almost entirely for urban purposes.

Makiki clay loam, 0 to 2 percent slopes (MkA) - This soil is on smooth fans and terraces. Included in mapping were small, stony areas and small areas of Kaena soils.

In a representative profile the surface layer is dark-brown clay
loam about 20 inches thick. The subsoil, about 10 inches thick, is dark-brown clay loam that has sub-angular blocky structure. It contains cinders and rock fragments. The subsoil is underlain by similar material, about 24 inches thick, that is massive. Below this are volcanic cinders. The soil is strongly acid to medium acid.

Permeability is moderately rapid. Runoff is slow, and the erosion hazard is nor more than slight. The available water capacity is about 1.7 inches per foot of soil. In places roots penetrate to a depth of 5 feet or more.

H. Noise

Short term noise impacts at construction sites are a normal result of construction activity. The State Department of Health administers rules and regulations relating to the hours during which construction is permitted and the noise levels permitted during those hours. The contractor will be required to apply for a permit from the State Department of Health should noise from construction activities exceed regulatory limits. The contractor will abide by the noise regulations incorporated into the permit.

Long term noise impact from the proposed development are expected to be minimal due to the nature of the proposed elderly rental apartment. As mentioned earlier, the increase in traffic is not expected to have a significant impact on the surrounding area.
I. Air Quality

Short term impacts on air quality are expected to be primarily related to dust generated by the construction activity. Dust will be generated in the course of excavating for foundations and utility lines. Dust control measures appropriate to the situation will be employed by the contractor, including where appropriate, the use of water wagons, erection of dust barriers and other methods for minimizing dust.

Due to the minimal impact from traffic projected for the project as discussed in the previous section on Noise, vehicular emissions will have minimal impact on the surrounding area.

J. Visual Impact

The proposed structure will have a finished height of about 72' 6" which is well below the 150-foot height limit of this AMX-2 Apartment Mixed Use District. The proposed development will not affect any important view planes in this area of McCully. The visual impact of this particular structure will be an in filling of an AMX-2 Apartment Mixed Use lot currently underutilized and surrounded by a mixture of commercial, residential and mid to high-rise apartments. As this and other underutilized AMX-2 Apartment Mixed Use District lots are developed, the primary visual impact will be to existing nearby structures. However, since many of the existing nearby structures are high-rise apartments buildings, the proposed development will fall in the profile of these existing high rises. Looking at the enclosed
photographs of the proposed location for the Artesian Vista one can see
the many high-rise apartment building throughout the surrounding area.

K. Hazards

The project site does not contain any nuisances, airport clear
zones, or other features which would jeopardize its development.

V. MAJOR IMPACTS AND ALTERNATIVES CONSIDERED

As mentioned throughout this report the proposed elderly affordable
rental apartment will not have a significant impact on the surrounding area in
terms of public services and the environment.

Positive socio-economic impacts are projected with the provision of
affordable housing, and increases in employment both short term and long
term.

A. No Action

This alternative was considered and rejected due to the
continuing negative cash flow that would result from payment of
property taxes, maintenance cost and liability expenses for the vacant
land.

B. Market Rental Project

This alternative was considered but would result in greater
impacts to the surrounding neighborhood, primarily related to traffic.

The cost of construction and the cost of land make it in-feasible
to develop a market rental project because market rental income will
not be able to provide a reasonable return on the investment.

VI. MITIGATION MEASURES

Since impacts from the proposed development are not expected to be significant, no extraordinary mitigation measures are planned. However, in order to minimize construction impacts of the project, the applicant's contractor will employ dust control measures where appropriate, including the use of water wagons, erection of barriers, and other methods for minimizing dust. The contractor will also be required to apply for a permit from the State Department of Health should noise from construction activities exceed regulatory limits. The contractor will abide by the noise regulations incorporated into the permit.

VII. GOVERNMENT PERMITS AND APPROVALS REQUIRED

The project will require the following governmental permits or approvals:

- 201G Permit Approval from the Honolulu City Council.
- Building Permits from the Department of Planning and Permitting, City and County of Honolulu.
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VIII. SIGNIFICANCE CRITERIA

The following review of the significance criteria indicates that the project will not have a significant impact on the environment.

- No irrevocable commitment to loss or destruction of any natural or cultural resource would result.

  The vacant project site is an urbanized lot that is partially covered with asphalt and was previously developed.

  The property is not listed on either the Hawaii or National Registers of Historic Places. With no previous record of historic or archaeological discoveries, the proposed development is not expected to have an impact on archaeological resources.

  During the construction of the project, should any previously unidentified archaeological resources such as artifacts, shell, bone, or charcoal deposits, human burial, rock or coral alignments, pavings or walls be encountered, the applicant will stop work and contact the Historic Preservation Office for review and approval of mitigation measures.

- The action would not curtail the range of beneficial uses of the environment.

  The proposed development will not curtail, but will instead enhance the range of beneficial uses of the environment. The present vacant property partially covered in asphalt is void of all natural landscaping, offering no beneficial use of the possible
uses associated with the environment. With the development of the proposed project, landscaping and an irrigation system will be installed where none exist at the present time. The project site will provide much needed affordable elderly rental units to meet the growing housing demands of the elderly.

- The proposed action does not conflict with the state's long-term environmental policies or goals and guidelines.

The State's environmental policies and guidelines are set forth in Chapter 344, Hawaii Revised Statutes, "State Environmental Policy". The broad policies set forth include conservation of natural resources and enhancement of the quality of life. As discussed earlier, the project does not adversely affect significant natural resources. With the proposed development, the existing vacant property partially covered with asphalt and bare of any significant vegetation, for our seniors through the elderly provision of affordable rental units.

- The economic or social welfare of the community or state would not be substantially affected.

The project will give a temporary boost to the State's economy with the provision of short-term construction employment and related tax impacts, and a few long-term jobs in the form of a resident manager and a maintenance person.

The social welfare of the community would be positively
affected by the development of this affordable elderly rental apartment building, to those in most need in our community. The Artesian Vista Affordable Elderly Rental Apartment Development will offer an attractive living environment to the elderly and in addition will offer lush landscaping and open spaces, including a victory garden, all for the benefit of the elderly residents.

- **The proposed action does not substantially affect public health.**

  The proposed action will not affect public health. The proposed land use is compatible with the surrounding residential and commercial developments.

- **No substantial secondary impacts, such as population changes or effects on public facilities, are anticipated.**

  As mentioned earlier under "Residential Population" of our Draft EA the General Plan Population Guidelines establish a population range for the Primary Urban Center Development Plan Area for the Year 2010 of between 450,800 and 497,800 persons. In 1990 the actual population for the Primary Urban Center was 432,023. The additional population supported by this development will help the Primary Urban Center in reaching the population range planned in the Year 2010.

  The existing water system is adequate to accommodate the
proposed apartment building, according to a BWS letter dated February 2, 2001 (Appendix III, Agency Comments).

A sewer connection application was approved for this project on August 7, 2000 by the Department of Planning and Permitting. (Appendix III, Agency Comments).

Pacific Planning and Engineering, Inc. have prepared a traffic impact analysis report (TIAR) for the project. The Artesian Vista Elderly Apartment Project, when completed in the year 2003, would not affect the Level-of-Service (LOS) at the existing study intersections of Young Street and Artesian Street during the weekday commuter hours. No capacity mitigating actions are required due to the proposed project.

• No substantial degradation of environmental quality is anticipated.

The project will not result in a substantial degradation of the environment. Only minimal impact is projected during the construction phase. The project will be built at or near existing grade. Excavation for the project should be limited to the footings and foundation of the structure. Dust control measures appropriate to the situation will be employed by the contractor, including where appropriate, the use of water wagons, erection of dust barriers and other methods for minimizing dust. Only minimal impact is projected during the construction phase of the
The proposed action does not involve a commitment to larger actions, nor would cumulative impacts result in considerable effect on the environment.

The proposed project does not involve a commitment to larger actions nor will it result in cumulative impacts to the environment. The proposed Artesian Vista Affordable Elderly Rental Apartment Development will not generate future projects, creating a cumulative impact.

No rare, threatened or endangered species or their habitats would be affected.

No rare, threatened, or endangered species or their habitats would be affected in the proposed development.

Air quality, water quality or ambient noise levels would not be detrimentally affected.

Short term impacts on air quality are expected to be primarily related to dust generated by the construction activity. Dust will be generated in the course of excavating for foundations and utility lines. Dust control measures appropriate to the situation will be employed by the contractor, including where appropriate, the use of water wagons, erection of dust barriers and other methods for minimizing dust.

Short term noise impacts at construction sites are a normal result of construction activity. The State Department of Health
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administers rules and regulations relating to the hours during which construction is permitted and the noise levels permitted during those hours. The contractor will be required to apply for a permit from the State Department of Health should noise from construction activities exceed regulatory limits. The contractor will abide by the noise regulations incorporated into the permit.

Long term noise impact from the proposed development are expected to be minimal due to the nature of the proposed elderly rental apartment.

Water quality would not be detrimentally affected by the proposed development. The Honolulu Board of Water Supply (BWS) currently provides potable water for the project site via an 12" line on Artesian Street or an 8' line on Young Street. No off-site water improvements are needed to service the proposed development.

- The project would not affect environmentally sensitive areas, such as flood plains, tsunami zones, erosion-prone areas, geologically hazardous lands, estuaries, fresh waters or coastal waters.

The project site is in Zone X, an area determined to be outside the 500 year flood plain.

The project will not affect tsunami zones, erosion-prone areas, geologically hazardous land, estuaries, fresh water nor coastal waters.
Substantially affects scenic vistas and view planes identified in county or state plans or studies.

The proposed development will not impact on important coastal views, since the eight story, 72'-6" high building is well below the 150-foot height limit of this AMX-2 Apartment Mixed Use District. Visual impact of this particular structure will be an in filling of an AMX-2 Apartment Mixed Use District surrounded by a mixture of commercial, residential and mid to high-rise apartments.

Requires substantial energy consumption.

The Hawaiian Electric Company has existing power lines serving this area and the applicant will coordinate development of the project to insure that the power lines will be adequate to support the proposed rental apartment development. Normal energy consumption for an eight story building of this nature is anticipated. The apartment building will be designed to incorporate energy saving light fixtures, energy efficient split system air conditioning and energy efficient hot water heaters.

XI. AGENCY COMMENTS ON THE DRAFT ENVIRONMENTAL ASSESSMENT AND THE APPLICANT’S RESPONSES

The applicant has prepared a response to each of the comments received during the agency review period for the Draft Environmental Assessment.
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Artesian Vista An Affordable Elderly Rental Development

Copies of the agency comment letters and the applicant’s responses are included in Appendix VIII.

X. RECOMMENDATION

Based on this Final Environmental Assessment, a Finding of No Significant Impact (FONSI) for the proposed Artesian Vista Affordable Elderly Rental Apartment Development is anticipated.

***************
APPENDIX I

RENDERING, SITE PLAN, FLOOR PLAN,
ELEVATIONS AND LANDSCAPING
APPENDIX II

TRAFFIC IMPACT ASSESSMENT REPORT
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TRAFFIC IMPACT ASSESSMENT REPORT
FOR
ARTESIAN VISTA APARTMENTS

February 5, 2001

Honolulu, Oahu, Hawaii

Prepared for:
Hawaii Housing Development Corporation

Prepared By:
Pacific Planning & Engineering, Inc.
1221 Kapiolani Boulevard, Suite PH-60
Honolulu, Hawaii 96814
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APPENDICES

Appendix A. Manual Traffic Count Data
Appendix B. Definitions of Level-of-Service for Unsignalized Intersections
FOREWORD

The traffic forecasts shown within this report's figures and tables are the direct result of Pacific Planning & Engineering, Inc.'s proprietary analytical tools. For report editing and review purposes, some or all of the forecast values have been rounded to the nearest five vehicles from our mathematical results, although we do not imply this level of accuracy can exist in any forecast method. The rounded values, however, reasonably quantify the forecasted traffic volumes for the purposes of this study.

The traffic impact assessment report deals with traffic volumes and roadway capacity, and is not a design document. Recommendations of mitigation actions relate solely to capacity improvements to reduce or minimize traffic delays.
EXECUTIVE SUMMARY

Pacific Planning & Engineering, Inc. (PPE) was engaged to identify and assess future traffic impacts that would be caused by the proposed Artesian Vista Apartments project in Honolulu, Oahu, Hawaii.

Project Description

The Hawaii Housing Development Corporation is proposing to develop an elderly affordable rental project in Honolulu, Oahu, Hawaii. The project site is located along Artesian Street near its intersection with Young Street and is identified by Tax Map Key: 1-2-8-02:32. The site is currently being used as a parking lot. Figure ES-1 shows the project location.

The proposed Artesian Vista Apartments project is intended to be an elderly (age 62+) rental project consisting of 53 one-bedroom affordable units, a resident manager’s unit and 24 on-site parking stalls. Access to the project will be via a driveway on Artesian Street. The project is expected to be completed by late 2002 and occupied by early 2003.

Methodology

Analysis was conducted for the intersection of Young Street with Artesian Street to determine the relative impact of the proposed Artesian Vista Apartments Project on the local roadway system.

Future traffic was forecasted for the study intersection by adding the following:
• Existing traffic volumes at the study intersection.
• the increase in through traffic on Young Street and
• Traffic generated by the project.

This study assesses the impact on each intersection by determining and comparing the level-of-service (LOS) for existing traffic, year 2003 forecasted traffic without the project and year 2003 forecast with the project traffic conditions.

The time periods analyzed include the two weekday commuter peak hours (morning and afternoon). These periods were studied since traffic volumes on the surrounding roadways would be highest at these times.

Conclusions and Recommendations

The Artesian Vista Apartments Project, when completed in the year 2003, would not affect the Level-of-Service (LOS) at the existing study intersection of Young Street with Artesian Street during the weekday commuter hours. No capacity mitigating actions are required due to the proposed project.

A parking analysis shows that the 24 parking spaces provided as part of the Artesian Vista Apartments should be adequate for the intended use as an elderly rental facility.
PROJECT DESCRIPTION

The Hawaii Housing Development Corporation is proposing to develop an elderly affordable rental project in Honolulu, Oahu, Hawaii. The project site is located along Artesian Street near its intersection with Young Street and is identified by Tax Map Key: 1-2-8-02:32. The site is currently being used as a parking lot. Figure 1 shows the project location.

The proposed Artesian Vista Apartments project is intended to be an elderly (age 62+) rental project consisting of 53 one-bedroom affordable units, one resident manager's unit and 24 on-site parking stalls. Access to the project will be via a driveway on Artesian Street. The project is expected to be completed by late 2002 and occupied by early 2003.
EXISTING CONDITIONS

An inventory of existing conditions was conducted to ascertain the current traffic conditions in the area and to provide a basis for estimating the potential traffic impact of the proposed project. The review included the land uses in the area, roadway facilities, and existing traffic conditions.

Land Uses

The land uses in the vicinity of the project consists primarily of commercial and residential uses. Land uses nearby include Washington Intermediate School, Zippy's, Central Union Church and Times Supermarket.

Roadway Facilities

Young Street is a two-lane road which runs from Victoria Street near Thomas Square to Isenberg Street near Mollitli Field. Young Street runs in a parallel path between two major arterials, Beretania Street and South King Street. The major intersections along this street are signalized. On-street parking is generally allowed throughout during all times of the day. The posted speed limit is 25 miles per hour (mph). Young Street services a variety of mostly commercial land uses via numerous driveways. Artesian Street is a short two-way road between Bingham Street and South King Street.

The study intersection of Young Street with Artesian Street is schematically shown on Figure 2.
Traffic Conditions

The commuter peak periods in the area generally occurs on weekdays between 6:45 to 8:45 in the morning and 4:00 to 6:00 in the afternoon. These periods were studied since traffic volumes on the surrounding roadways would be highest at these times.

Manual traffic counts were taken at the intersection of Young Street with Artesian Street on Wednesday, January 24, 2001 during the weekday morning peak period and on February 1, 2001 during the weekday afternoon peak period. These counts were used as the baseline condition upon which future estimated traffic volumes were added.

Manual counts were taken of passenger cars, trucks and buses by turning movements and approaches. During the field counts, the weather was mostly sunny and the pavement was dry. Figure 2 shows the present volume of traffic at the study intersection for the observed peak hours. Manual traffic count data is summarized in Appendix A.

Observed Traffic Conditions

The following observations were made during the field survey:

- There were no apparent problems with traffic flow at the intersection of Young Street with Artesian Street during both peak periods.
FUTURE CONDITIONS

A survey was conducted of planned developments in the immediate area to estimate future traffic conditions at the study intersections.

Future Land Uses

The project site is located in a portion of Honolulu where much of the surrounding area is already developed. The Oahu Regional Transportation Plan\(^1\) (ORTP) projects zero or low levels of growth in population and employment by the year 2020. No known further development in the immediate vicinity of the project are anticipated within the study time period.

Future Roadway Facilities

Within the study time frame, there are no known roadway improvements planned in the immediate vicinity of the project. The roadway patterns and study intersection laneages are expected to remain the same as existing.

PROJECTED TRAFFIC CONDITIONS

Future traffic was forecasted for traffic conditions without and with the Artesian Vista Apartments Project. Traffic forecasts were estimated for the year 2003 when the project is expected to be completed.

Future Traffic Without Project

Future traffic without the project was forecast by adding the following: 1) existing traffic volumes and the 2) increase in traffic on Young Street based on historical growth trends. The resulting traffic volume forecasts at the study intersections for the traffic peak hours without the project in year 2003 are shown in Figure 3.

Traffic Growth on Young Street

Through-traffic is traffic that travels on a roadway without a specific origin or destination near the project site. The growth in through-traffic on Young Street was estimated using historical data obtained from HDOT traffic count stations on Beretania Street and South King Street. The historical trends shows practically no increase in traffic on either Street. Therefore, no growth rate was applied to Young Street.
EXISTING LANEAGE

Weekday Morning Peak Hour

Weekday Afternoon Peak Hour

PACIFIC PLANNING ENGINEERING, INC
Year 2003 Weekday Morning & Afternoon Peak Hour Traffic Volumes Without Project
Figure 3
**Future Traffic With Project**

Future traffic with the project was forecasted by adding traffic generated by the Artesian Vista Apartments Project to the forecasted traffic without the project. The resulting peak hour traffic volume forecasts with the project are shown in Figure 4.

The standard three-step procedure of trip generation, trip distribution and traffic assignment was used to estimate peak hour traffic from the proposed project.

Trip generation for the proposed project was determined based on the project land uses and trip rate data from the ITE Trip Generation Report\(^2\). Table 1 shows the number of trips generated due to the project. Since the site is currently being used as a parking lot, these parking related trips should be deducted from the site trip generation. However, for conservatism, the project trips were added to roadway network without consideration for the existing parking lot.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Morning</th>
<th></th>
<th>Afternoon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enter</td>
<td>Exit</td>
<td>Enter</td>
</tr>
<tr>
<td>Elderly Apartments (54 units)</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

The trip distribution step estimates the distribution of vehicle trips to their predicted destinations and origins. Project trips were generally distributed based on the population distribution of Oahu.

---

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. The project traffic was generally assigned to the surrounding roads based upon existing travel patterns.
EXISTING LANEAGE

Weekday Morning Peak Hour

Weekday Afternoon Peak Hour

Year 2003 Weekday Morning & Afternoon Peak Hour Traffic Volumes With Project

Figure 4
TRAFFIC IMPACT ANALYSIS

Analyses were conducted for the following intersection to determine the relative impact of the Artesian Vista Apartments Project:

- Young Street with Artesian Street (Unsignalized Intersection)

Analyses were conducted for the existing, 2003 forecasts without project and 2003 forecast with project traffic conditions.

Analysis Methods

The study intersection was analyzed using procedures from the Highway Capacity Manual\(^3\) (HCM). The methodology measures traffic operations using a Level-of-Service (LOS) rating from "A" to "F", where LOS "A" is the best and LOS "F" is the worst. Appendix B provides detailed definitions of the LOS used in this study.

Unsignalized Intersection Analysis

The LOS for unsignalized intersections is determined by computing the average control delay. Control delay includes the initial deceleration delay, queue move-up time, stopped delay and final acceleration delay. This delay is defined for each minor movement (in this case, the right-turn movement out of the driveway) only and not for the intersection as whole. The LOS is classified into the six letter categories ranging from less than 10 seconds of average control delay per vehicle (LOS "A") to over 50 seconds of average control delay per vehicle (LOS "F").

Analysis Results

The results of the analysis for the weekday morning and afternoon peak hours are shown in Tables 2 and 3. The results show that there would be no change in traffic operations due to the Artesian Vista Apartments Project.

<table>
<thead>
<tr>
<th>Movement</th>
<th>Existing</th>
<th>2003 Without Project</th>
<th>2003 With Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young Street with Artesian Street</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northbound LT/TH/RT from Artesian St</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Southbound LT/TH/RT from Artesian St</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Eastbound LT from Young St</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Westbound LT from Young St</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Movement</th>
<th>Existing</th>
<th>2003 Without Project</th>
<th>2003 With Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young Street with Artesian Street</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northbound LT/TH/RT from Artesian St</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Southbound LT/TH/RT from Artesian St</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Eastbound LT from Young St</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Westbound LT from Young St</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>
PARKING GENERATION

The proposed Artesian Vista Apartments project includes 24 parking stalls. A review was conducted to determine the adequacy of the parking provided by the project.

Parking generation was determined based on the project land uses and data from the ITE Parking Generation Report\(^4\). The parking generation rate is the number of occupied parking spaces per one unit of independent variable. The average parking generation rate on a weekday for a retirement community is 0.27 occupied stalls per dwelling unit which includes parking generated by residents, visitors and service personnel. Therefore, using this rate with 54 occupied units gives an estimated peak parking load of 15 stalls.

A survey was also conducted of the number of parking stalls provided by other elderly housing projects and is shown in Table 4.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Location</th>
<th>Total Units</th>
<th>Stalls Provided</th>
<th>Ratio (units/stall)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalunihau</td>
<td>Aala Park</td>
<td>151</td>
<td>42</td>
<td>3.60:1</td>
</tr>
<tr>
<td>Makamae</td>
<td>Nuuanu</td>
<td>124</td>
<td>27</td>
<td>4.59:1</td>
</tr>
<tr>
<td>Paokalani</td>
<td>Kalakaua</td>
<td>150</td>
<td>28</td>
<td>5.36:1</td>
</tr>
<tr>
<td>Midrise</td>
<td>Kalakaua</td>
<td>123</td>
<td>40</td>
<td>3.08:1</td>
</tr>
<tr>
<td>KapunaI</td>
<td>Liliha</td>
<td>162</td>
<td>57</td>
<td>2.84:1</td>
</tr>
<tr>
<td>Manoa Gardens</td>
<td>Manoa</td>
<td>80</td>
<td>40</td>
<td>2.00:1</td>
</tr>
<tr>
<td>King Street Apts.</td>
<td>King Street</td>
<td>91</td>
<td>42</td>
<td>2.17:1</td>
</tr>
</tbody>
</table>

Based on the results of the analysis and the survey of other elderly housing projects, the 24 parking spaces (2.25:1) provided for the Artesian Vista Apartments should be adequate for a 54 one-bedroom elderly rental project.

CONCLUSIONS AND RECOMMENDATIONS

The Artesian Vista Apartments Project, when completed in the year 2003, would not affect the Level-of-Service (LOS) at the existing study intersection of Young Street with Artesian Street during the weekday commuter hours. No capacity mitigating actions are required due to the proposed project.

A parking analysis shows that the 24 parking spaces provided as part of the Artesian Vista Apartments should be adequate for the intended use as an elderly rental facility.
### Project: 135.0 Young Street Apartments

**Date:** 1/24/01

#### NORTHBOUND

<table>
<thead>
<tr>
<th>Start Time</th>
<th>NB-LT HV</th>
<th>NB-RH HV</th>
<th>SB-LT HV</th>
<th>SB-RH HV</th>
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<tbody>
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<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
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<td>0</td>
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<tr>
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#### SOUTHBOUND

<table>
<thead>
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<th>SB-RH HV</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:45 AM</td>
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<td>0</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

#### PEAK HOUR

<table>
<thead>
<tr>
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<th>NB-RH HV</th>
<th>SB-LT HV</th>
<th>SB-RH HV</th>
</tr>
</thead>
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<tr>
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<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**NB Approach Total:** 30

**SB Approach Total:** 29

#### EASTBOUND

<table>
<thead>
<tr>
<th>Start Time</th>
<th>EB-LT HV</th>
<th>EB-RH HV</th>
<th>WB-LT HV</th>
<th>WB-RH HV</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:45 AM</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7:00 AM</td>
<td>9</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>7:15 AM</td>
<td>5</td>
<td>0</td>
<td>0</td>
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<tr>
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<td>8:30 AM</td>
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</table>

#### WESTBOUND

<table>
<thead>
<tr>
<th>Start Time</th>
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<th>WB-RH HV</th>
</tr>
</thead>
<tbody>
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</tr>
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<td>4</td>
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<td>7:45 AM</td>
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</tr>
<tr>
<td>8:00 AM</td>
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<tr>
<td>8:15 AM</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>8</td>
<td>0</td>
</tr>
</tbody>
</table>

#### PEAK HOUR

<table>
<thead>
<tr>
<th>Start Time</th>
<th>EB-LT HV</th>
<th>EB-RH HV</th>
<th>WB-LT HV</th>
<th>WB-RH HV</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 AM</td>
<td>34</td>
<td>0</td>
<td>117</td>
<td>3</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>0%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**EB Approach Total:** 158

**WB Approach Total:** 452

### 15 Minute Totals

- **All Approaches**
- **Northbound**
- **Southbound**
- **Eastbound**
- **Westbound**

- **Legend:**
  - ● Northbound
  - ○ Southbound
  - ▲ Eastbound
  - ▼ Westbound

- **Graph:**
  - **X-Axis:** 6:45 AM to 8:30 AM
  - **Y-Axis:** 0 to 200

- **Data Points:**
  - 7:00 AM
  - 7:15 AM
  - 7:30 AM
  - 7:45 AM
  - 8:00 AM
  - 8:15 AM
  - 8:30 AM

---

\[ A - 1 \]
# Traffic Analysis Report

**Project:** 155.0 Young Street Apartments  
**Date:** 2/1/01

## Traffic Flow Analysis

### North-South Road
#### Northbound

<table>
<thead>
<tr>
<th>Start Time</th>
<th>NB-LT</th>
<th>HV</th>
<th>NB-TH</th>
<th>HV</th>
<th>NB-RT</th>
<th>HV</th>
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<tbody>
<tr>
<td>4:00 PM</td>
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<td>8</td>
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<td>0</td>
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<td>0</td>
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<td>3</td>
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</tr>
</tbody>
</table>

**Peak Hour:**
- NB Approach Total: 80

### Southbound

<table>
<thead>
<tr>
<th>Start Time</th>
<th>SB-LT</th>
<th>HV</th>
<th>SB-TH</th>
<th>HV</th>
<th>SB-RT</th>
<th>HV</th>
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<tr>
<td>4:15 PM</td>
<td>2</td>
<td>0</td>
<td>9</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>4:30 PM</td>
<td>7</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>4:45 PM</td>
<td>6</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>5:00 PM</td>
<td>5</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>5:15 PM</td>
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**Peak Hour:**
- SB Approach Total: 70

### East-West Road
#### Eastbound

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<thead>
<tr>
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<th>EB-LT</th>
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<th>EB-TH</th>
<th>HV</th>
<th>EB-RT</th>
<th>HV</th>
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</thead>
<tbody>
<tr>
<td>4:00 PM</td>
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<td>0</td>
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<td>41</td>
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<td>0</td>
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<td>0</td>
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<td>59</td>
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**Peak Hour:**
- EB Approach Total: 247

### Westbound

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**Peak Hour:**
- WB Approach Total: 379

## 15 Minute Totals

![15 Minute Totals Graph](image-url)

- All Approaches
- Northbound
- Southbound
- Eastbound
- Westbound
APPENDIX B

LEVEL-OF-SERVICE DEFINITIONS

FOR

UN SIGNALIZED INTERSECTIONS

LEVEL-OF-SERVICE FOR UNSIGNALIZED INTERSECTIONS

The Level-of-Service (LOS) for an unsignalized intersection is determined by the computed or measured control delay and is defined for each minor movement. LOS is not defined for the intersection as whole. LOS criteria are given in the following table. Control delay includes initial deceleration delay, queue move-up time, stopped delay and final acceleration delay.

<table>
<thead>
<tr>
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<th>Control Delay Per Vehicle (sec)</th>
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<td>( \leq 10 )</td>
</tr>
<tr>
<td>B</td>
<td>&gt; 10 and ( \leq 15 )</td>
</tr>
<tr>
<td>C</td>
<td>&gt; 15 and ( \leq 25 )</td>
</tr>
<tr>
<td>D</td>
<td>&gt; 25 and ( \leq 35 )</td>
</tr>
<tr>
<td>E</td>
<td>&lt; 35 and ( \leq 50 )</td>
</tr>
<tr>
<td>F</td>
<td>&gt; 50</td>
</tr>
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The proposed LOS criteria are somewhat different from the criteria for signalized intersections. The primary reason for this difference is that drivers expect different levels of performance from different kinds of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an unsignalized intersection. Additionally, several driver behavior considerations combine to make delays at signalized intersections less onerous than at unsignalized intersections. For example, drivers at signalized intersections are able to relax during the red interval, whereas drivers on the minor approaches to unsignalized intersections must remain attentive to the task of identifying acceptable gaps and vehicle conflicts. Also, there is often much more variability in the amount of delay experienced by individual drivers at unsignalized than signalized intersections. For these reasons, it is considered that the control delay threshold for any given LOS is less for an unsignalized intersections than it would be for a signalized intersection.
APPENDIX III
AGENCY COMMENTS PRIOR TO DRAFT EA
February 2, 2001

Mr. Kazutoshi Yato  
Kazu Yato, AIA & Associates  
2033 Round Top Terrace  
Honolulu, Hawaii  96822

Dear Mr. Yato:

Subject: Your Letter of January 18, 2001 Regarding the 54-One Bedroom Unit on Young Street, TMK: 2-8-02: 32

Thank you for your letter regarding the proposed elderly apartment.

The existing water system is presently adequate to accommodate the proposed development.

The availability of water will be confirmed when the building permit is submitted for our review and approval. If the development plan requires action by the Department of Planning and Permitting (DPP), the plan should be approved by DPP before we take action on the proposed development. When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

If a three-inch or larger meter is required, the construction drawings showing the installation of the meter should be submitted for our review and approval.

If you have any questions, please contact Joseph Kaakua at 527-6123.

Very truly yours,

FOR CLIFFORD S. JAMILE  
Manager and Chief Engineer
APPLICATION NO.: 2000/SCA-0437
DATE RECEIVED: 08/04/2000
PROJECT NAME: Artesian/Young Street Apartments / Dwelling Unit

LOCATION:

<table>
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<tr>
<th>Zone</th>
<th>Section</th>
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<tbody>
<tr>
<td>2</td>
<td>8</td>
<td>002</td>
<td>032</td>
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</tbody>
</table>

1828 - YOUNG ST 10,790 Sq. Ft.

SPECIFIC LOCATION: 1828 Young Street

APPLICANT: Advanced Engineering Technology
2557 Waiakamoi Avenue Suite A
Honolulu, HI 96817

DEVELOPMENT TYPE: Dwelling, Multi-family
SEWER CONNECTION WORK DESIRED: Existing

OTHER USES:

NON-RESIDENTIAL AREA: s.f.
APPROXIMATE DATE OF CONNECTION: 08/04/2001

PROPOSED UNITS

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<th>UNITS TO BE DEMOLISHED</th>
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<tr>
<td>1-Bedroom:</td>
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<tr>
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<tr>
<td>4-Bedroom:</td>
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<td></td>
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REMARKS

Provided connection is made in Artesian Street.

DATE ISSUED: 08/07/2000
EXPIRATION DATE: 08/07/2002

Reviewed by: Arturo Saavedra Jr.

For Director of Department of Planning and Permitting.
December 28, 2000

Ms. Sharyn Miyashiro, Executive Director
Housing & Community Development Corporation of Hawaii
677 Queen Street, #300
Honolulu, Hawaii 96813

Re: Artesian Vista Affordable Senior Housing Project

Dear Ms. Miyashiro:

The Hawaii Housing Development Corporation is planning to build an affordable senior housing facility on the mauka/ewa side of the Young Street and Artesian Street intersection. I have reviewed the project plans and support this project.

As you are aware, housing rental studies substantiate the dire and continuing need for low-income and affordable housing for senior citizens in Hawaii, especially in the urban Honolulu area, and is a high priority item for both the City and State.

I have always been an advocate of affordable senior housing and the Artesian Vista project certainly meets the necessary criteria. This project will go a long way in enhancing the quality of life for the many senior citizens in our urban communities. I hope you will give this project your support as well.

Very truly yours,

[Signature]

Andy Mirikitani
Councilmember

AKM:
cc: Mr. Gary Furuta
APPENDIX IV
PHOTOGRAPHS OF SITE
Photo No. 1  View of 1828 Young Street from the Corner of Young and and Artesian Streets

Photograph No. 2  View from 1828 Young Street Looking South Toward Young Street
Photograph No. 3   View from 1828 Young Street Looking North Toward Beretania Street

Photograph No. 4   Looking West Along Young Street Taken at the Corner of Young and Artesian Streets
Photograph No. 5 Looking East Along Young Street Taken by Young and Artesian

No. 6 Looking South on Young and Artesian Streets Taken from 1828 Young Street Project Site
No. 7  Looking North on Artesian Street With View of 1828 Young Street in the Foreground

Photograph No. 8  Taken from South West Corner of 1828 Young Street
APPENDIX V
CONSTRUCTION TIME FRAME
DEVELOPMENT SCHEDULE

- DESIGN
  NOV 2001

- BUILDING PERMIT
  MAR 2002

- CONSTRUCTION
  MAR 2002 – FEB 2003

- CERTIFICATE OF OCCUPANCY
  FEB 2003

- RENT UP
  2Q 2003
## FINANCING PRO FORMA SOURCES

### INTERIM (CONSTRUCTION)

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### TAKEOUT (PERMANENT)

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EXHIBIT 1
APPENDIX VI
MARKET STUDY
I. INTRODUCTION

The Data@Work, a market research firm that specializes in analyzing residential real estate markets for developers, has been retained by the Hawaii Housing Development Corporation, General Partner of Artesian Vista L.P., to perform a study analyzing the market for affordable senior rentals in Honolulu. This study focuses on the historical, current, and projected rental market conditions and trends to help forecast the absorption for the proposed project, named "Artesian Vista."

The study entailed collecting, comparing and analyzing information that has a bearing on the numerous aspects of market demand for the proposed project, including but not limited to publicly available real property, economic and commercial data. Rental information was collected from rental agencies, condominium resident managers, and the classified ads in the Sunday Honolulu Advertiser. Income and demographic information was obtained from the State of Hawaii, City and County of Honolulu, Bureau of the Census, Applied Geographic Systems and National Decision Systems. The data and statements herein are based on independent research by the staff of Data@Work and are in no way contingent upon outside findings or recommendations.

II. PROJECT DESCRIPTION

The subject property is located on the Moiliili section of Honolulu, half a mile from the resort community of Waikiki. It is a 10,850 square foot flat parcel, sitting on the corner of Young and Artesian Streets. Nearby is Central Union Church, Olivet Baptist Church, Times Supermarket, Zippy’s and a host of other retail and service outlets. It is zoned AMX-2, suitable for multi-level attached residential housing development.

The project concept is to build 53 one-bedroom units, approximately 420 square feet in size, for the purposes of renting them to qualifying renters. Including a manager's unit, the project will total 54 units, and will sit within an eight-story concrete block mid-rise building. The parking will consist of 23 stalls, which works out to a 2.23 to 1 ratio, plus one loading stall, all at grade. A private park/visitor garden is planned on the ground level. A multi-purpose room for group activities, as well as a kitchen, bathroom and office, is planned for the second floor.

Target Market: In order to qualify, the rental candidates will have to demonstrate that they are over the age of 61 and that their annual incomes fall within the limits established by the affordable housing policy guidelines. There will be 6 units made available to those making 30% or less of the AMI (Area Median Income) and 47 units made available to those making 50% or less of the AMI. That said, and with the HCDCH's approval, any units targeting the market of renters making 50% of AMI that remain vacant after 30 days of advertising and that have no rental agreements in process can be offered to qualified candidates at 60% of AMI.

The project's rental rates will be set as follows:
- 6 units at 30% of the AMI Level will have a monthly rent of $313 gross, and
- 47 units at 50% of the AMI Level will have a monthly rent of $551 gross.

Cost of personal electrical power usage will be included in the gross rent.

The subject property can be considered to be in a desirable location since it is close to shopping, support services restaurants, transportation, parks, and medical facilities. In addition, it lies at the epicenter of Oahu's population and employment base; this makes it convenient to most families living on the island.
III. OVERVIEW OF THE OAHU ECONOMY

The segment of the residential real estate market relevant to this project is the one consisting of rental properties in and around Honolulu appropriate for senior citizens whose incomes are at or below the target area median income (as defined by HUD for the Honolulu metropolitan area). However, we think it important to arrive at an understanding of this market by looking at not just the overall real estate market, but the island economy as well.

In the first place, this allows one to take account of those sectors impacting housing, and be better able to set up some expectations about the viability of the project, as it is affected by economic trends. In the second place, this is because each of the residential real estate segments are interlinked, with conditions existing in one part of the market often spilling over into other sectors.

ECONOMIC CONDITIONS: The Hawaii economy in 2001 is poised to outperform the overall U.S. economy for the first time in more than a decade. This will be due to a combination of the U.S. economy cooling off from its torrid pace of the past few years and the Hawaii economy continuing its steady expansion. With regard to its principal engines of growth, the local economy will be led by an estimated 3 percent growth in visitor arrivals, an increase of about 2 percent in employment, and a cyclic upturn in construction. The construction industry is benefiting from very strong real estate sales activity coupled with the need for new homes in the residential market and renovation of the state’s visitor plant. This should allow this sector to post its second straight year of double-digit growth in 2001.

The slowdown in the nationwide economy is, of course, a risk to the Hawaii economy, but we hope the former will continue a so-called “soft landing” (i.e. several quarters of slower growth), rather than an outright recession. We say this because the current slowdown has been intentionally engineered by the Federal Reserve via their six interest rate increases over the past 18 months. With inflation low, the Fed’s recent move to lower interest rates will act to counter the rapidly decelerating economy and insure that growth picks up in the second half of 2001.

20 YEAR COMPARISON BETWEEN JOB COUNTS AND AVERAGE RENTS

The Hawaiian economy is now predicted to grow at about 2.5% to 3.5% (real GSP) over the next 3 years. The effect of that on the rental market is expected to put pressure on rental rates to rise. As seen in the chart above, there is a relationship between economic growth, as
demonstrated by the growth in the job count (creation), and rents. Last year, the number of new jobs jumped up, while the average rent for condominium units rose only slightly. This suggests that rents will follow upward very soon, particularly if the job count numbers continue to increase.

IV. OAHU RESIDENTIAL REAL ESTATE MARKET

Here, we examine the real estate market in general, in order to put a context over the rental market. This market has two major components, the new home development market, and the resale market. The more important is the new home market as it is from this sector that a competing project will come. As such, we look at the residential development side first.

A. THE NEW RESIDENTIAL DEVELOPMENT MARKET

THE SUPPLY OF NEW HOMES:

The ability of the market to supply homes to the market is conditional on good economic conditions, as is finally the situation currently. The best indicator as to supply conditions in the near and the medium future (1-3 years) is permits.

HISTORICAL TRENDS: The construction of new multi-family units on Oahu experienced tremendous growth in and around the mid-1970’s. With single family home construction declining through the first half of the 1970’s, the surge in multi-family activity was a logical response to strong housing demand caused by a rapidly growing island population. The emphasis on multi-family (primarily condominium) construction continued through the mid-1970’s, when surging interest rates and a severe nationwide recession negatively impacted both the local and nationwide housing markets. This period also marked the peak for Oahu multi-family construction, which has never really recovered.

THE NUMBER OF BUILDING PERMITS PULLED ANNUALLY IN HONOLULU

Prepared by Ricky C cosìday, Data @ Work 2101 Nuuanu Avenue, Honolulu, HI 96817
Telephone: (808) 733-3227 Email: rcssiday@aol.com
From 1975 the total number of multi-family permits declined steadily for more than a decade, appearing to bottom out at approximately 800 permits in 1987. Between 1988 and 1991, multi-family construction began to increase again, as more upscale condominium products were developed. However, the economy started to turn downwards in 1990, with the result that developers began to focus on producing more affordable products (mainly townhomes) in West Oahu.

In the 1990s, the trends in permits show that single-family production has been going between 1,200 and 2,700 units. Much more dramatically, condominium production has swung between 400 and 3,500 units. As can be seen in the chart of all building permits, the single-family permits had bottomed out in 1997, three years ago. Condominiums, on the other hand, have yet to see a bottom.

As can be seen in the chart below, the numbers of permits have fallen precipitously since 1991. Additionally, the per unit condominium values have been trending downward. There have been a few upward spikes, caused by a large scale, high-end project coming to market, like the Naunu Towers development. However, in the last three years, both the unit counts and the relative values have been falling, also a sign of a slow or depressed economy.

**MULTIFAMILY PERMITS & VALUE PER PERMIT CHARTS**

CONCLUSION: Condominium production has fallen to very low levels. As a result, there will be no new inventory of units available, if the market demand turns up. The likely conclusion is that rental rates are positioned to move up rapidly, if and when demand turns up.

**THE DEMAND FOR NEW HOMES:**

As described earlier in the section on the economy, jobs and personal income for those living on Oahu are slated to grow, and grow well. This expansion of buying power will stimulate Oahu's housing demand in several ways. First, it will give those presently housed the confidence and wherewithal to move to a better home. Second, it will give those who are not
housed the same means to go out and purchase a new home. And, finally, it will stimulate immigration, which will again put pressure on the real estate market to provide housing.

Looking at the long-term demand for housing, we turn to DBEDT’s latest long-term 2025 forecast. According to these state economists, population growth is forecasted to rise steadily over the long run. This, in turn, will create a steady demand for new homes. Given their population growth estimates, we estimate that demand will be on the order of some 1,600 new homes needed annually between 2000 and 2005.

Besides population growth driven housing demand, job growth derived housing demand looks even stronger. Given DBEDT’s forecasts of some 6,200 jobs per annum, the potential demand for housing looks to be 3,100 new units annually. While there is a lag time between job growth and housing demand, eventually demand does expand, something last witnessed in the late 80s and early 90s, when lack of housing supply at the middle and lower income ranges resulted in an affordable housing policy put into place.

In sum, local economic and government planning professionals are predicting good growth in the economy, as well as steady growth in housing demand, over the next few years. Given this demand, as well as no readily apparent new sources of supply, rental rates should be moving upwards.

NEW HOMES MARKET TRENDS:

Besides looking at permits, we examined the actual production of new condominium housing over the last few years. In 1999, total attached product closings were around 1,700 units, but in 2000, it appears that only 1,500 condominium units will be closed. The reason for this is that the bad economy over the last few years forced developers to pare down their operations, the result of which is that production has really slowed (off by about 14% for 2000). Indeed, the recession of the 1990s put a number of developers out of business, and forced the remaining ones to operate at greatly reduced levels of production. As such, it is doubtful that the development community will be capable of providing new supply of condominium housing in the near term future.

SUMMARY: Given the low level of permitting, plus the weakened condition of housing suppliers (or developers), it is not hard to imagine there being a housing shortage in the future. Whether it is the near or the far future depends on the pace of job creation and income growth. If the new home developers cannot supply sufficient housing for Oahu residents, then the resale market is saddled with the burden of absorbing all that demand.

With the new home market in an undersupply condition, the resale markets usual response is to move to a higher number of transactions followed by a movement to higher prices. Indeed, this is occurring now.

B. THE RESALE RESIDENTIAL MARKET:

At this moment, the residential market is in good shape; the total number of resale closings for 2000 was higher by 16.8% from 1999, with the total dollar volume of sales up another 22.1%. Notably, overall prices are beginning to rise: up until 2000, the resale transactions were higher, but sales prices were lower – last year, this trend in falling prices began to be reversed, which is a characteristic of a market that is turning around.

Currently, prices are equal or above where they were 12 months ago (both the median and the average price levels). For the segment of the market relevant for this project, the condominium market, resale transactions overall are greater by 20%, the median price is the same as last year ($125,000) and the average price is up almost 5%, from $157,770 to $165,342.
Oahu regional performance has been diverse with the prices in areas such as Hawai'i Kai (up 10.4 percent) and Makiki (up 9.1 percent) being up noticeably while areas such as Pearlridge and Salt Lake are actually down slightly from a year ago. However, given the rise in the number of closings in 2000, we expect the overall condominium prices to do considerably better in 2001. This will be particularly true in those areas where single family prices have risen sharply, which causes potential buyers to opt for the more affordable multi-family alternative.

For condominiums that are located within a reasonable proximity to the project, Metro and East Oahu, the market looks even stronger: median prices for Metro and East Oahu are up 7.1% and 9.1% respectively (to $150,000 and $240,000), with average prices up as well (9.4% and 5%).

Clearly, the residential real estate market that is 'For Sale' is experiencing good growth, leading to an expectation that prices will continue to move higher over the near term (2-3 years).

CONCLUSIONS: The market for residential real estate is clearly on the upswing, and will continue demonstrating good activity over the coming 2-3 years. This will cause housing prices to rise and, after a short lag period, put pressure on rental rates as well.

SUMMARY AND PREDICTIONS: In sum, the level of condominium permits is very low; new home developers sense an improved outlook, but are nevertheless very cautious; and the resale market is moving up. Thus, there will be little new condominium product coming to market anytime soon. At the same time, the resale market has moved from being favorable to buyers to favoring sellers. As home prices move upward, this pressures rents to rise. This will make the subject development more likely to enjoy good demand in the near to mid term future.
V. THE RESIDENTIAL RENTAL MARKET

Here, we look at a number of indicators of the relative tightness or laxity in the rental marketplace.

BACKGROUND: Apartment living has been an important part of Oahu's housing market since the late 1960's. With developable land both limited and expensive, multi-family units have been the most efficient way to provide affordable housing for a significant percentage of Honolulu residents. New renters and residents, such as those just moving out on their own, retired persons, and others who do not have the desire or the ability to purchase real estate rely on the supply of available rental units for their housing needs. This applies, even more so, to those who are elderly and living on a fixed income: apartment living offers security, convenience, community, and (hopefully) affordability.

OVERVIEW: In reviewing conditions in the overall market for rental units on Oahu, one looks at a number of different indicators of supply and demand, including:

- Advertisements,
- Vacancies, and
- Average Rental Rates and Levels.

A. RENTAL ADVERTISING

An excellent indicator of rental market supply conditions is the number of apartments that are advertised for rent in the local newspaper. This will be called "Ad Counts" in the following tables and charts, and we use it here as an indicator of the supply of rental units available to the market. In general, advertisement count is a counter-cyclical indicator: low numbers of advertisements are associated with strong (tight) rental market conditions while a high ad count number suggests there is excess supply relative to demand (a weak rental market; i.e., low rental prices).

OVERALL MARKET: The chart below shows the monthly count of all Oahu and Metropolitan Honolulu apartment advertisements since 1975. It suggests the market went from a condition of being tight, with few rentals available, prior to 1992, to having lots of rentals being advertised. This condition prevailed for about seven years, with a slight bias to the upside, or continued weakness in the market.

Then, in 1999, the market appears to have turned, with apartment advertisements falling from a peak in the 900 ads per month to below 400 ads per month.
At the same time, the trend in the level of rental rates was changing, going from falling rents to steady (or rising) rents.

**Monthly Count of Apartment Advertisements**

ONE BEDROOM MARKET: Like the overall apartment market, the rental market for one-bedroom units mirrors the recent downward trend in the inventory of rental units. This is particularly so in the areas surrounding the subject property, Makiki, Waikiki and Downtown. The decline in the availability of one bedroom units began about 30 months ago, in July 1998 (when there was an over 400 ads for one-bedroom apartments in the paper) and continues through the last month that we have complete data for, October 2000, where there were only 171 ads.

**APARTMENT ADVERTISEMENT COUNTS FOR SELECTED AREAS OF HONOLULU**

Prepared by Ricci Cassiday, Data @ Work 2101 Nuuanu Avenue, Honolulu, HI 96817 Telephone: (808) 733-3227 Email: rcassiday@aol.com
ONE BEDROOM ADVERTISEMENTS BY PRICE RANGE: When the one bedroom market is looked at in terms of the distribution by price range, the market for these rentals island-wide is weighted most heavily on the $600-$699 price range. The most relevant to the subject project is the one bedroom market in the $400-$499 and the $500-$599 rental ranges.

The chart below shows the distribution for the latest data available (October) for the island of Oahu, and details that there are about 11 availables in the $400-$499 price range and about 50 availables in the next higher range.

THE DISTRIBUTION OF OAHU APARTMENT RENTS BY BEDROOM COUNTS

B. VACANCY LEVELS

Next, we looked at the level of vacancies for the metropolitan area of Honolulu in relation with the average monthly number of rental advertisements. The U.S. Bureau of the Census produced the vacancy data, while the rental data is proprietary to Prudential Locations Research department.

THE VACANCY RATES RELATIVE TO RENTAL AD COUNTS

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<th>Oahu Vacancy Rate</th>
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<tr>
<td>1990</td>
<td>499</td>
<td>3.8%</td>
</tr>
<tr>
<td>1992</td>
<td>885</td>
<td>3.4%</td>
</tr>
<tr>
<td>1994</td>
<td>1,397</td>
<td>5.0%</td>
</tr>
<tr>
<td>1995</td>
<td>1,543</td>
<td>5.4%</td>
</tr>
<tr>
<td>1996</td>
<td>1,728</td>
<td>4.7%</td>
</tr>
<tr>
<td>1997</td>
<td>1,558</td>
<td>6.4%</td>
</tr>
<tr>
<td>1998</td>
<td>1,734</td>
<td>6.3%</td>
</tr>
<tr>
<td>1999</td>
<td>1,562</td>
<td>7.6%</td>
</tr>
<tr>
<td>Past 12 Mo.</td>
<td>1,037</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.8% (est.)</td>
<td></td>
</tr>
</tbody>
</table>

Prepared by Ricki Cassiday, Data © Work 2101 Nuuanu Avenue, Honolulu, HI 96817
Telephone: (808) 738-3227 Email: ricki@ad.com
It shows that changes in the number of ads foreshadow changes in the vacancy rates. When the ad counts begin to fall, then in short order following that the vacancy rates begin to fall. This lag time varies from one to three years, in the event of a peak in the market, as seen in the chart below.

As rental ads have been in a downward trend since the first half of 1998, we estimate that 2000 will be the first year that the vacancy rate begins to fall.

**COMPARISON BETWEEN NUMBER OF RENTAL ADS AND RENTAL VACANCIES**

Going forward, it looks like there will be at least two years of falling vacancies, which will be advantageous for all rental projects, including the subject property.

**C. RENTAL RATES:**

Another important relationship that helps to describe and forecast the rental market is relationship between the number of rental ads to the level of rents charged. This is seen in the chart below, which depicts the historical relationship between annual advertising counts and average rents for Metropolitan Honolulu.
In general, the two lines seem to be inversely related: a falling number of ads appears to be a precursor to a rise in rents. In terms of ads, the trend over this decade has been that these rental availabilities have been increasing. However, after a seesaw movement between 1996-1998, apartment advertisements have fallen dramatically, especially in 2000.

COMPARISON BETWEEN RENT LEVELS AND THE NUMBER OF RENTAL ADS

At the same time, the trend in average rents being charged has been bottoming out, after six years of declining, 1992-1998. We think that this rise will be sustained over the coming years, particularly given that the concurrent fall in the inventory is nearing levels that, in the 1980s, precipitated double digit increases in rental levels.

CONCLUSIONS: A number of inducives of the rental market were described and, in general, found to be indicating a tightening rental market. The following section looks at this in finer detail.
VI. CURRENT MARKET RENTAL CONDITIONS

OVERVIEW: Honolulu's apartment rental market generally has a tighter supply and stronger demand than the overall Oahu market. Metropolitan Honolulu has historically been a desirable area of residence since it offers employees who work in the town area the opportunity to live in close proximity to their work. This desirability and convenience of so-called "town living" generally serves to put pressure on availabilities and rents. As such, we mainly focus here on rental conditions in Honolulu.

Looking specifically at a 10-year data series describing the rental market for one bedrooms, trends are showing rental levels in and around the subject property have been falling for most of the decade. At the same time, the rental level for downtown Honolulu units look to have turned around... while the rents for Makiki units seem to be bottoming out.

RENTAL LEVELS IN COMPARISON WITH AD COUNTS: The open market for one-bedroom rentals can be further understood by relating the rental levels with the number of rental ads for the surrounding areas to the subject property. As can be seen below, the number of ads have begun to shrink, and the rental levels have begun to rise, at least in the Makiki area.

---

Prepared by Rocky Cassiday, Data @ Work 2101 Nuuanu Avenue, Honolulu, HI 96817
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COMPARISON BETWEEN ONE BEDROOM RENTAL ADS WITH RENTAL RATES

AVERAGE MARKET RENTS CHARGED: The rents for one bedrooms in town are shown for some of the more popular projects. In general, there is a trend towards higher rents.

MARKET RENTAL RATES FOR CONDOMINIUM PROJECTS IN THE AREA

<table>
<thead>
<tr>
<th>Project</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banyan Tree Plaza</td>
<td>839</td>
<td>931</td>
</tr>
<tr>
<td>Royal Capital Plaza</td>
<td>938</td>
<td>950</td>
</tr>
<tr>
<td>Brookside</td>
<td>935</td>
<td>1,011</td>
</tr>
<tr>
<td>Iolani Court Plaza</td>
<td>1,004</td>
<td>1,060</td>
</tr>
<tr>
<td>Matt Smith</td>
<td>1,020</td>
<td>1,083</td>
</tr>
</tbody>
</table>

OPEN MARKET ONE BEDROOM RENTAL RATES AND ADVERTISEMENT COUNTS: Finally, the following table describes the trends for one-bedroom rentals for the latest month of data and for the same month in the prior two years (November 1998 and 1999). It shows the area from Hawaii Kai through to Salt Lake. As can be seen, there are not many alternatives available to elderly, or anyone, at levels of rent that the subject property is providing.

1998-2000 HONOLULU RENTAL AD COUNTS AND AVERAGE RENTS BY PRICE RANGE

<table>
<thead>
<tr>
<th>Price Range</th>
<th>Date</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>$400-$499</td>
<td>No. of Rental Ads Average Rent</td>
<td>2</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$483</td>
<td>$480</td>
<td>$492</td>
</tr>
<tr>
<td>$500-$599</td>
<td>No. of Rental Ads Average Rent</td>
<td>83</td>
<td>81</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$554</td>
<td>$554</td>
<td>$556</td>
</tr>
<tr>
<td>$600-$699</td>
<td>No. of Rental Ads Average Rent</td>
<td>112</td>
<td>108</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$641</td>
<td>$638</td>
<td>$639</td>
</tr>
</tbody>
</table>

Prepared by Roby Cassiday, Data Work 2101 Nuuanu Avenue, Honolulu, HI 96817
Telephone: (608) 730-3327 Email: rcsidday@aol.com
Finally, the rental ads in Oahu’s leading print publication for rentals, Rentals Illustrated, were analyzed for ad counts and levels in the island. The following summarizes a recent edition of this periodical (January, 2001), which gives us a snapshot of the multifamily rental market (non-income-restricted units).

We note that the table does not reflect any rentals above the $600/month level; while this is where the bulk of the rental opportunities lay, they were deemed irrelevant to the target market, who would be interested in renting units underneath the $600/month level.

**SAMPLED RENTAL ADVERTISEMENTS BY PRICE RANGE, AS OF JANUARY, 2001**

<table>
<thead>
<tr>
<th></th>
<th>Within Honolulu</th>
<th>Within Oahu</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $500</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>$500-$524</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>$525-$549</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>$550-$574</td>
<td>7</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>$575-$600</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

Looking at the advertisements for these market rentals, the proposed development appears to offer a better value proposition to elderly renters. Of the three offerings for one-bedroom units under $500 described in the table above, two were located in Makaha and one was located on the North Shore. The one offering in town for the $500-$524 range was for a three floor walkup in the Liliha area, which is inferior to the proposed project both in terms of location and accessibility.

**CONCLUSIONS:** In summary, the proposed development does not have much competition from the open market of apartment rentals. In addition, the open market rental market has been responding to an improving state and island economy; the number of advertisements (supply) has been shrinking for two years, while the level of rents demanded (demand) has been rising. This also supports our belief that rental rates in general will rising over the near and medium future.

**VII. SENIOR DEMAND FOR AFFORDABLE RENTAL UNITS**

Now, we turn from describing the rental market conditions towards looking at the sources of demand for the subject property. There are two general sources. The first is 'new' demand, created when a household (whether a single person or a family) moves into the market. This can occur, in terms of this market, in two ways. First, a household enters the market physically, as when a household whose member is 61 years or older relocates to Honolulu from another location. The second is when a member of a household (previously located in Honolulu) reaches the age of 61.

Thus, this entails describing the current demographics and looking at projections for changes in these demographics. As mentioned earlier, the projections come from Applied Geographic Systems and National Decision Systems, which are firms that use mathematical models to analyze census data and economic trends to project population changes.

**A. 'NEW' DEMAND (POPULATION GROWTH-BASED) FOR ELDERLY AFFORDABLE RENTAL UNITS:**

**OVERVIEW:** We looked at the current demographics of the senior citizen population for the City & County of Honolulu. It looks back to the condition of this demographic in the 1990
census and then estimates the growth of this group by 2000, and then again over the next five years.

ELDERLY POPULATION GROWTH AND CHANGE, BY AGE GROUPS, 1990-2005

<table>
<thead>
<tr>
<th>Age Group</th>
<th>1990 (Actual)</th>
<th>2000 (Estimated)</th>
<th>2005 (Projected)</th>
<th>Δ% Growth 1990 to 2000</th>
<th>Δ % Growth 2000 to 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 TO 64 YEARS</td>
<td>36,772</td>
<td>40,291</td>
<td>46,991</td>
<td>9%</td>
<td>14%</td>
</tr>
<tr>
<td>65 TO 69 YEARS</td>
<td>33,720</td>
<td>34,835</td>
<td>37,433</td>
<td>3%</td>
<td>7%</td>
</tr>
<tr>
<td>70 TO 79 YEARS</td>
<td>24,114</td>
<td>29,442</td>
<td>29,031</td>
<td>16%</td>
<td>2%</td>
</tr>
<tr>
<td>75 TO 79 YEARS</td>
<td>16,237</td>
<td>21,309</td>
<td>21,890</td>
<td>23%</td>
<td>3%</td>
</tr>
<tr>
<td>60 TO 84 YEARS</td>
<td>9,530</td>
<td>12,356</td>
<td>14,170</td>
<td>24%</td>
<td>13%</td>
</tr>
<tr>
<td>65+ YEARS</td>
<td>7,495</td>
<td>10,757</td>
<td>12,554</td>
<td>30%</td>
<td>14%</td>
</tr>
<tr>
<td>Total Population</td>
<td>127,767</td>
<td>147,740</td>
<td>162,169</td>
<td>14%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Overall, the elderly population grew by 14% over the last 10 years, from 1990-2000. Projections going forward show only a 9% projected population growth rate, inasmuch as the recession/stagnation economically for the 1990s caused some outmigration from Oahu.

While we think that this drop in the growth rate from 14% to 9% will not hold up when the 2000 census comes out (we do not think that there was as much outmigration from Hawaii by this segment of the population as this projection suggests), we use it here to project annual growth in demand for senior affordable rental units. This growth should help to sustain demand for the proposed development.

PERCENTAGE CHANGE IN AGE GROUPS OVERTIME, 1990-2005

![Elderly Demographic Changes, 1990-2005](image)

DEMOGRAPHIC CHANGES AND TRENDS: We looked at the total growth of this senior citizen market and found that there will be an estimated 14,429 more citizens in this market by the year 2005 (as compared with 2000). The import of this is that it provides an idea of what the additional demand for rental units on Oahu by the senior citizens of society. This is described in the table below:
POPULATION TRENDS FOR SENIOR CITIZENS, AGED 60+

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>2000</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>127,767</td>
<td>147,740</td>
<td>162,169</td>
</tr>
<tr>
<td>Population Change</td>
<td>19,973</td>
<td>14,429</td>
<td></td>
</tr>
</tbody>
</table>

(Note, however, that given the return to economic prosperity, this projection may underestimate the population growth in Senior Citizens over the coming five years.)

In sum, this 9% growth should result in a total expansion of the elderly population by some 14,429 people, 2000-2005, or 2,886 a year. These would be people (such as the newly arrived chronologically, as well as physically, in relocations to Hawaii in order to enjoy a healthier environment) that the subject project would most likely be able to accommodate.

PROJECTED POPULATION-BASED HOUSING POTENTIAL DEMAND GROWTH, 2000-2005

<table>
<thead>
<tr>
<th></th>
<th>1990</th>
<th>2000</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>127,767</td>
<td>147,740</td>
<td>162,169</td>
</tr>
<tr>
<td>5 Yr. Population Change</td>
<td></td>
<td>14,429</td>
<td></td>
</tr>
<tr>
<td>1 Yr. (Annual) Increase</td>
<td>2,886</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20% of Annual Increase</td>
<td>577</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Finally, we break down this annual increase of 2,886 new renters by income ranges. The census projections we used earlier allowed that about 9.3% of all seniors make an annual income of $15,000 and under (or 30% of AMI), while a total of 20% make an annual income of $25,000 or under (or 50% of AMI). This yields an estimate of 577 new rental units being demanded every year from 2000-2005 by seniors who are just entering the market.

CONCLUSIONS: We estimated the annual demand on the part of qualified individuals for these units to be some 577 rentals overall, with a little less than half of that (268 seniors) being qualified for the 30% AMI units.

B. EXISTING DEMAND FOR ELDERLY AFFORDABLE RENTAL UNITS

In addition to the annual growth projection of this population, we made an estimate of overall demand for the project, given the existing pool of potential renters. Starting with this overall number, we then broke it down by income brackets (allowing us to project the level of demand for the subject development much more accurately). The elderly population projection for the timeframe of 2000 by income ranges for Oahu looks like this:

<table>
<thead>
<tr>
<th>POTENTIAL DEMAND FOR AFFORDABLE RENTAL UNITS</th>
<th>For the Year 2000 (Estimated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOUSEHOLD INCOME</td>
<td>Over 62 yrs</td>
</tr>
<tr>
<td>UNDER $5,000</td>
<td>2,738</td>
</tr>
<tr>
<td>$5,000 TO $9,999</td>
<td>4,775</td>
</tr>
<tr>
<td>$10,000 TO $14,999</td>
<td>4,362</td>
</tr>
<tr>
<td>$15,000 TO $24,999</td>
<td>8,629</td>
</tr>
<tr>
<td>$25,000 TO $34,999</td>
<td>8,567</td>
</tr>
<tr>
<td>Potential Market</td>
<td>29,072</td>
</tr>
</tbody>
</table>

Prepared by Ricky Cassidy, Data @ Work 2101 Nuuanu Avenue, Honolulu, HI 96817 Telephone: (808) 733-3227 Email: rcassidy@aol.com
The table shows that there are about 30,000 households (29,072) whose member(s) are at or above the age of 61 on Oahu that make under $35,000. However, only about 21,000 (20,933) of those make under $25,000, which is about the maximum ($25,850) a renter can make in order to qualify for a one-bedroom unit targeted to renters making 50% of the median annual income or less.

We then broke this down further into the potential demand for each of the target markets for the subject property, 30% & 50%. The tables below extract and summarize this information:

**POTENTIAL DEMAND FOR AFFORDABLE RENTALS TARGETING 30% AMI**

*For the Year 2000 (Estimated)*

<table>
<thead>
<tr>
<th>HOUSEHOLD INCOME</th>
<th>Over 62 yrs</th>
<th>Demand: 30% AMI &amp; less</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNDER $5,000</td>
<td>2,738</td>
<td>2,738</td>
</tr>
<tr>
<td>$5,000 TO $9,999</td>
<td>4,775</td>
<td>4,775</td>
</tr>
<tr>
<td>$10,000 TO $14,999</td>
<td>4,362</td>
<td>4,363</td>
</tr>
<tr>
<td>$15,000 TO $24,999</td>
<td>8,629</td>
<td></td>
</tr>
<tr>
<td>Potential Market</td>
<td>29,072</td>
<td>11,876</td>
</tr>
</tbody>
</table>

And, of that 29,072 total potential demand, there are about 11,876 households in the 30% AMI target market. In other words, this 11,876 are senior citizens that make under $15,000, which is about the maximum a renter could make ($15,500) in order to qualify for an unit targeted to renters making 30% of the median annual income or less.

Turning to the target market for the 50% of AMI, the total market would be some 20,933 renters. These are senior citizens making under $25,850 a year.

**POTENTIAL DEMAND FOR AFFORDABLE RENTALS TARGETING 50% AMI**

*For the Year 2000 (Estimated)*

<table>
<thead>
<tr>
<th>HOUSEHOLD INCOME</th>
<th>Over 62 yrs</th>
<th>Demand: 50% AMI &amp; less</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNDER $5,000</td>
<td>2,738</td>
<td>2,738</td>
</tr>
<tr>
<td>$5,000 TO $9,999</td>
<td>4,775</td>
<td>4,775</td>
</tr>
<tr>
<td>$10,000 TO $14,999</td>
<td>4,362</td>
<td>4,363</td>
</tr>
<tr>
<td>$15,000 TO $24,999</td>
<td>8,629</td>
<td>8,629</td>
</tr>
<tr>
<td>$25,000 TO $34,999</td>
<td>8,567</td>
<td>428</td>
</tr>
<tr>
<td>Potential Market</td>
<td>29,072</td>
<td>20,933</td>
</tr>
</tbody>
</table>

In sum, there are potentially 12,000 renters available for the 6 units currently targeting the 30% AMI market for the proposed development, as well as a potential 20,933 renters available for the 47 units targeted on the 50% AMI senior population.
Finally, we took this potential demand, and tried to project a more definite demand figure for the project. We assumed that there was some percentage of the total market would prefer not to rent, but instead either live with relatives or stay at home. As such, we wanted to run a projection reflecting this. We chose a 10% factor, i.e., one in ten potential qualifying renters would apply.

<table>
<thead>
<tr>
<th>INCOME</th>
<th>Factor</th>
<th>Target: 30% AMI &amp; less</th>
<th>Target: 50% AMI &amp; less</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNDER $5,000</td>
<td>10%</td>
<td>274</td>
<td>274</td>
</tr>
<tr>
<td>$5,000 TO $9,999</td>
<td>10%</td>
<td>478</td>
<td>478</td>
</tr>
<tr>
<td>$10,000 TO $14,999</td>
<td>10%</td>
<td>436</td>
<td>436</td>
</tr>
<tr>
<td>$15,000 TO $24,999</td>
<td>10%</td>
<td>0</td>
<td>863</td>
</tr>
<tr>
<td>$25,000 TO $34,999</td>
<td>10%</td>
<td>0</td>
<td>43</td>
</tr>
<tr>
<td>Potential Market</td>
<td></td>
<td>1,188</td>
<td>2,093</td>
</tr>
</tbody>
</table>

While we have no quantitative survey instrument or other forms of hard data to support our selection of this factor, we tried to be conservative. Further, we tested our methodology with professionals and other staff in senior affordable rental apartment management firms. They verified that it was a reasonable assumption, particularly in light of the lack of availability in the market, and the lack of quality housing in the area for this group.

CONCLUSIONS: In sum, we estimate there are some 1,188 renters who would qualify for the 6 units targeting 30% AMI and 2,093 renters (some additional 900 renters) who would qualify for the 47 units targeting the 50% AMI renters. Thus, we conclude there is more than sufficient demand for the proposed development, on the level of households having both the qualifications and inclination to rent a one-bedroom unit.

C. OTHER SOURCES OF DEMAND FOR THE PROPOSED PROJECT:

WAITLIST DEMAND FOR AFFORDABLE UNITS BY ELDERLY HOUSEHOLDS

Finally, there is pent-up, or unfulfilled, demand for housing, the result of there not being available the kind of units at the kind of price ranges for those needing homes. In the case of this project, the demand for affordable priced rentals on the part of senior island residences is best indicated by the waiting list for senior affordable rentals managed by the state’s Housing and Community Development Corporation of Hawaii. They currently have a waiting list of 336 senior persons for affordable rentals on the island of Oahu, according to HCDCH’s data (up to October 2000). It is very likely that a large percentage of those would apply at the proposed project.

NEIGHBORHOOD DEMAND FOR THESE UNITS

Within the immediate neighborhood, the demographics show that there are as many as 336,000 people are living within 5 miles of the subject property, 77,000 of which are over the age of 60. There are some 29,000 living within 5 miles whose incomes are under $29,000.

A simple extrapolation allows us to project that there are some 21,000 potential renters living in the immediate area, who could qualify for a project of this kind. This represents some 60% of the overall demand in Honolulu (21,648/29,305).

DEMOGRAPHIC COMPOSITION OF AREA SURROUNDING SUBJECT PROPERTY

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Telephone: (808) 738-3227 Email: rcassidy@ad.com
As the demand for this kind of project is shaped by the proximity of the project to where the existing potential renter is living, it bodes well for the project that there is a large pool of renters within the immediate area. We note that the project could take advantage of the grouping instinct within renters and other consumers of real estate products. This is when the initial consumer ‘pulls’ with him other ‘like-minded’ consumers. The relevance to this project is that there is a very large pool of potential consumers for this project.

**OTHER SOURCES**

In addition to the overall aging of the population already in place, there will be additional demand from the net migration coming to the islands. For instance, the percentage of elderly to the total population is greater on the outer islands than on Oahu – conceivably, some of those people could come to Honolulu to be close to family and/or services, and end up renting at the subject project. By the same token, there could be demand for affordable rentals coming from people on the mainland seeking to escape the extremes of heat and cold there. Add to that the fact they live alongside of a major destination area, at a very low rental rate, would be attractive. This has already been talked about.

Another source of dynamic demand comes from renters willing to relocate. It is conceivable that this project will draw demand from the already renting senior apartment dwellers in other senior rental condominiums. While there could be any number of reasons, two stand out as particularly plausible.

1. The first would be that renters would be willing to relocate in order to enjoy a ‘better’ location. Here ‘better’ could mean a number of things, including being closer to relatives, to more reasonable shopping facilities (around University and King Street), to better services and/or to recreational facilities (such as the University of Hawaii at Manoa).

2. The second would be that renters would be enticed to move to a newer building. As noted in the permitting analysis section, there has been a downturn in condominium construction activity, and the stock of residential condominiums is aging. As noted further on in this report, between 1980 and 1969, approximately 1,250 affordable rental units were built in metropolitan Honolulu; many of these renters could relocate to the subject project.
VIII. THE CURRENT SUPPLY OF AFFORDABLE RENTAL UNITS FOR SENIOR CITIZENS

Here, we review the supply situation for units similar to those being contemplated by the proposed development.

HISTORICAL SUPPLY: There are a number of affordable/market rental projects in metropolitan Honolulu. Between 1980 and 1989, approximately 1,250 affordable rental units were built in metropolitan Honolulu. In the past eight years, approximately 2,300 affordable rental units were constructed in metropolitan Honolulu of which approximately 950 are elderly units. The table below summarizes the affordable/market rental projects built in metropolitan Honolulu since 1990.

HONOLULU AFFORDABLE ELDERLY RENTAL PROJECTS BUILT SINCE 1990

<table>
<thead>
<tr>
<th>Project</th>
<th>Year Built</th>
<th>Elderly Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kulaokahua</td>
<td>1992</td>
<td>24</td>
</tr>
<tr>
<td>Pohulani</td>
<td>1992</td>
<td>263</td>
</tr>
<tr>
<td>Manoa Gardens</td>
<td>1992</td>
<td>80</td>
</tr>
<tr>
<td>Na Lei Hulu Kupuna</td>
<td>1992</td>
<td>76</td>
</tr>
<tr>
<td>Philip Street</td>
<td>1993</td>
<td>34</td>
</tr>
<tr>
<td>Honuaikahua</td>
<td>1995</td>
<td>150</td>
</tr>
<tr>
<td>Kualana Hale</td>
<td>1997</td>
<td>176</td>
</tr>
<tr>
<td>Royal Kinau</td>
<td>1998</td>
<td>61</td>
</tr>
<tr>
<td>Wisteria Vista</td>
<td>2000</td>
<td>91</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>954</td>
</tr>
</tbody>
</table>

CURRENT MARKET CONDITIONS: The following tables summarize potential competitive projects.

COMPARABLE SENIOR AFFORDABLE PROJECTS WITH ONE BEDROOM UNITS

<table>
<thead>
<tr>
<th>Project</th>
<th>Units</th>
<th>Living Area</th>
<th>Rent Range</th>
<th>Vacancies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honuaikahua</td>
<td>9</td>
<td>486-516</td>
<td>$450</td>
<td>0</td>
</tr>
<tr>
<td>Kulana Hale</td>
<td>42</td>
<td>525</td>
<td>$726</td>
<td>0</td>
</tr>
<tr>
<td>Manoa Gardens</td>
<td>16</td>
<td>565</td>
<td>$714 - $720</td>
<td>0</td>
</tr>
<tr>
<td>Pohulani</td>
<td>132</td>
<td>550</td>
<td>$466 - $716</td>
<td>0</td>
</tr>
<tr>
<td>Royal Kinau</td>
<td>60</td>
<td>450</td>
<td>$510</td>
<td>1</td>
</tr>
<tr>
<td>Wisteria Vista</td>
<td>91</td>
<td>384</td>
<td>$498</td>
<td>0</td>
</tr>
<tr>
<td>Kalakaua Vista</td>
<td>80</td>
<td>420</td>
<td>$313-$551</td>
<td>NA</td>
</tr>
<tr>
<td>Kaneohe Senior</td>
<td>44</td>
<td>428</td>
<td>$595</td>
<td>NA</td>
</tr>
</tbody>
</table>

As shown in the tables above, comparable rental rates for one-bedroom units range in rent from $450 to $726 with interior areas between 450 and 565 square feet. Comparable "affordable" units have similar living areas to "market" units; however, "affordable" rents are approximately 20 to 30 percent below the market averages.

The most recently completed project that compares to the proposed development is Wisteria Vista, located in the neighborhood of the subject property. It has been operational since September of last year. It has 91 one-bedroom units, and had a period of six months between first and full occupancy. Since then, turnover has been low, with only two
apartments changing their occupants. The last two comparable projects have "NA" in the Vacancies column, as they have too little time on the market to be relevant.

PROJECTED NEW INVENTORY: Within the Metropolitan Honolulu market area, currently there are two new affordable elderly rental projects planned to be built, or being built. As shown in the table below, there are approximately 203 senior units planned.

PROJECTED METROPOLITAN HONOLULU AFFORDABLE ELDERLY RENTAL PROJECTS

<table>
<thead>
<tr>
<th>New Projects</th>
<th>Elderly Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalakaua Vista (2001)</td>
<td>80</td>
</tr>
<tr>
<td>Kulana Hale, Phase II (2001)</td>
<td>81</td>
</tr>
<tr>
<td>Hawaii Kai Affordable Senior Rentals (2002)</td>
<td>5</td>
</tr>
<tr>
<td>Kualani Seniors Apartments (2002)</td>
<td>31</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>197</strong></td>
</tr>
</tbody>
</table>

Kalakaua Vista is a senior affordable rental project that broke ground last year. It consists of 80 one-bedroom units, all around 450 square feet, configured as a combination living/dining area, a kitchen area, a separate bedroom, a separate bathroom, and a linen and a clothes closet. The units will be offered with air conditioning, floor covering, range, refrigerator, disposal, window coverings, and ceiling lights. The rental rates will break down as follows: 8 units will have a monthly rent of $313 gross, or 30% of the AMI Level, and 72 units will have a monthly rent of $351 gross, or 60% of the AMI Level.

Kulana Hale is a Senior Assisted Living project with a requirement to make available a percentage of their 81 studio and one-bedroom units available to those making 60% or less of AMI. As this project will provide for many more services – from housecleaning to (possibly) meals and nursing aid – the rental costs will be significantly greater than what is presently being charged at neighboring projects. We note that this project has been in the planning for several years.

Kualani Senior Apartments is a 30 one and two bedroom unit project in Hawaii Kai. It is targeting half of its units for those in the 30% AMI range ($363) and the other half in the 60% AMI range ($726). Completion is estimated for 2001.

The Hawaii Kai affordable elderly rental project is part of a larger complex. It is breaking ground this year, and has only 5 units which are targeting renters whose income is in the 30% income bracket of AMI.

There may be other projects in the works that are not mentioned here – it is said there are a number of local and off-shore investment entities researching the opportunities in the senior rental market, both in terms of building new and in converting already constructed apartment buildings. That said, the process of applying and being accorded tax credits takes about 12 months, and is a competitive process. Add to that the 12-month period for build-out, and you have a two-year timeline before occupancy. All in all, the likelihood of these unknown projects coming to light in a manner to compete with the proposed project is uncertain, and maybe quite unlikely. In any event, by that time, the proposed project should be completely occupied.
IX. COMPETITION WITHIN THE ELDERLY AFFORDABLE RENTAL MARKET

WAIT LISTS: Rental agents specializing in the senior market sector have indicated that demand for affordable senior rental housing on Oahu still remains tight overall, and is very tight in metropolitan Honolulu. Indeed, most senior affordable rental projects have waiting lists, with the exception of Royal Knau, which has a single one-bedroom unit available. Generally, the waiting lists are longest on projects with the lowest rents; specifically, projects where rents are set at 30% of the tenant’s monthly income.

The Housing and Community Development Corporation of Hawaii has a waiting list of 319 applicants for affordable senior housing (as of 10/31/00) on Oahu. Those applying can expect to wait at least 18 months on average. Furthermore, the true number which need assistance could be larger since the waiting list has been closed. In addition, many of these applicants are not looking for housing but instead want rental assistance for their current housing unit.

The City & County of Honolulu currently has approximately 3,100 certificates and vouchers available to qualified families. Even though the HCCH and Honolulu City & County Housing Office assisted senior rental housing waiting lists may over-state total potential need, they do give a clear indication that a shortage of affordable senior housing still exists.

RENTER PREFERENCES: In terms of meeting the qualitative needs of senior affordable renters, rental agents and other professionals have made the following observations:

• The 'location' is very important to renters. The preference here is determined by proximity to family and friends, proximity (or the facility of access) to the necessities of shopping, recreation, medical services, etc.

• The condition of their living facilities is very important: in general, the physical housing plant on Oahu, and particularly those in the center of Honolulu that would house senior citizens, has aged over the last decade – the economic slowdown has retarded the impetus to either build new facilities, or upgrade present ones.

• Seniors prefer that the rental levels be 'gross' in the sense that the utilities are included into the total rent.

• In general, seniors prefer a one-bedroom configuration to a studio unit.

• Seniors prefer a unit with an ability to place 'walking' grab bars alongside the walls, as well as walk-in showers (as opposed to bathtubs)

SUMMARY: A review of the competitive environment the project will be operating in shows that there are signs of good demand for such units. Further, on the qualitative side, the project meets or exceeds a number of renter preferences, particularly the two most important - good location, new construction and sensible design.
X. ABSORPTION ANALYSIS

Housing absorption analysis is performed here in order to be able to project the point at which supply meets demand — where equilibrium is achieved at a particular moment for both price and units. For this project, the most important factor appears to be the limitation of the supply of rental units suitable for the target market. This lack of supply is indicated, as noted above, by the wait list of the state and the lack of vacancies in the competing projects. It is buttressed by the additional fact that there does not look to be any competition on the horizon — nothing that would change the present 'supply-constrained' condition of the market (i.e., there are no projects in the pipeline that would come to market with number of units which would absorb much of the existing demand).

Factors on the demand side which are acting in support of the projection of quick occupancy for the subject project:

- There is the wait list of 336+ applicants, plus the aforementioned dearth of vacancies in the existing senior projects.
- There is demographic analysis showing a growing population of senior citizens, many of whom will demand affordable rental units.
- There is the coming bulge in the demographic distribution of the baby boomer generation, reaching the age of 62 (the demographic effect, as the baby-boom generation reaches maturity), plus the fact that people are living longer.
- There is demand also coming from the present group of renters, who would transfer in order to upgrade their accommodations.
- There is 'pent-up' or unsatisfied demand historically, of people out there who are living with relatives or in less-than-desirable accommodations because there has been nothing offered to them in the price range they can afford.

In consideration of the supply constraints and of the demand pressures, it is likely that the project will be given strong consideration by a large number of potential renters in a very short span of time. Before deciding to rent at the project, the prospective renter will consider his immediate options, which are laid out in the table below.

### COMPARABLE PROJECTS HAVING ONE BEDROOM UNITS

<table>
<thead>
<tr>
<th>Project</th>
<th>Units</th>
<th>Living Area</th>
<th>Rent Range</th>
<th>Vacancies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honukaha</td>
<td>9</td>
<td>450</td>
<td>$450</td>
<td>0</td>
</tr>
<tr>
<td>Kualana Hale</td>
<td>43</td>
<td>525</td>
<td>$725</td>
<td>0</td>
</tr>
<tr>
<td>Manoa Gardens</td>
<td>16</td>
<td>565</td>
<td>$714 - $720</td>
<td>0</td>
</tr>
<tr>
<td>Puhulani</td>
<td>132</td>
<td>550</td>
<td>$466 - $716</td>
<td>0</td>
</tr>
<tr>
<td>Royal Kinau</td>
<td>61</td>
<td>480</td>
<td>$510</td>
<td>1</td>
</tr>
<tr>
<td>Wisteria Vista</td>
<td>91</td>
<td></td>
<td>$498</td>
<td>0</td>
</tr>
<tr>
<td>Kalakaua Vista</td>
<td>80</td>
<td>456</td>
<td>$313-5551</td>
<td>NA</td>
</tr>
</tbody>
</table>

Relative to most other new senior affordable projects, Artesian Vista offers a superior location and new facilities. In return for enjoying those benefits, the prospect will have to be willing to accept a slightly smaller sized residence. However, the prospect will be accorded the additional benefit of paying less than most of the other projects. Given that these other senior rental projects are currently fully occupied, it is likely that all current and future demand will be directed to the proposed project.
XI. CONCLUSIONS

Overall, the economic and residential real estate conditions were shown to be creating the kind of demand that would be favorable to the kinds of units proposed by the subject project. In general it appears we are entering a market characterized by low supply and growing demand.

Taking demand first, Oahu's overall rental market shows signs of bottoming out, with upward pressure on rental rate noticeable in several neighborhoods, including those surrounding the proposed project. There are wait lists in place for senior rental units, and the present inventory is almost 100% occupied, again with wait lists. In addition, an examination of the projected growth in the numbers of households in the targeted market was performed and it was shown that demand, both potential and 'effective' should be more than sufficient to absorb the number of proposed units.

On the supply side, the tight market conditions prevailing in existing senior affordable rental projects were noted. In addition, an examination of future supply was made and we concluded there are few projects in the works that target either the general rental market demand, or the specific target market demand (senior affordable rental demand). We concluded that neither current nor future supply does not appear sufficient to absorb significantly the current and projected demand in this market.

Given these indicators, the project should be able to achieve similar rental rates of other affordable rental projects (from $510 at Royal Kina to $726 at Kulana Hale) and achieve a rapid absorption. The developer can anticipate between 100 and 300 applications within six to twelve months after marketing is commenced. Of those, the developer should be able to convert enough to be able to reach full occupancy within a six to twelve month period after the project has been completed.
APPENDIX VII

MAJOR EXEMPTIONS BEING REQUESTED
THROUGH THE 201G APPLICATION
MAJOR EXEMPTION BEING REQUESTED
THROUGH THE 201G APPLICATION

A. Exemption from Section 21-3.90-1 (b) (Table 21-3.3), Land Use Ordinance (Luo), relating to maximum density, to allow about 30,998 square feet of floor area, which exceeds the maximum allowable floor area by about 16,801 square feet. (Note: the maximum floor area ratio (FAR) is 1.316; whereas the FAR for the project will be about 2.95)

B. Exemption from Chapter 21, Article 6, Section 21-6.20, Land Use Ordinance, Table 21-6.1, Ordinance No. 99-12, as amended, relating to off-street parking and loading to allow the provision of 23 parking stalls for the proposed 54-unit one-bedroom affordable elderly apartment rental development, instead of 59 required parking stalls (54 + 5 guest stalls).

C. Exemption from Section 21-6.30(d), Land Use Ordinance, relating to off-street parking and loading, to allow the provision of 12 standard sized stalls and 11 compact sized stalls (total of 23 stalls) in lieu of the required 30 standard sized stalls and 29 compact sized stalls (total of 59 stalls).

D. Exemption from Chapter 21, Article 6, Section 21-6.120(b) of the Land Use Ordinance to allow the loading space to have a horizontal dimension of 19'-0" x 8'-5", rather than the required 35'-0" x 12'-0". The one loading space will meet the required vertical clearance of at least 10 feet.

E. Exemption from Chapter 21, Article 6, Section 21-6.130(a) and Section 21-6.70 of the Land Use Ordinance relating to required yard and off-street parking and loading, to allow:

a) Loading space to encroach into the required 10-foot front yard by about 4'- 6".

b) Parking spaces to encroach into the required 10-foot side yards by about 9'- 6" on the west side of the property; 7'- 6" on the north side of the property, and 3'- 0" to 5'- 6" on the east side of the property. Wheel stops will be installed, where appropriate.
F. Exemption from Chapter 21, Article 3, Section 21-3.90-1 (3) relating to height setback, to allow a 3.4-foot encroachment into the 13.3-foot height setback required for this 72'-6" tall building at the east and north side of the building.

G. Exemption from the Park Dedication requirements, Chapter 22, Article 7, ROH, to allow the provision of about 1,777.4 square feet for park dedication. The break-down is as follows, 949 square feet for a private park, (347 square feet of victory garden and 602 square feet of private park and picnic area), and an additional 828.4 square feet of a multi-purpose room, to satisfy park dedication requirements. The multi-purpose room will provide space for socialization and recreational activities in addition to other uses. Park dedication requirements for the project would normally amount to 3,099 square feet (10% of 30,998 square feet) of park and playground area.

H. Exemption from Section 21-4.30(a) to allow picnic furniture (tables and chairs) to be placed within required front yard in private park area.

I. Exemption from Section 21-4.30(b) to allow roof overhang to encroach into required front yard by about 5'-0" rather than 30 inches at the south-east corner of building at ground floor lobby.

J. Exemption from Section 21-4.30 to allow building corner (lobby) at south-east corner to encroach into the required yard setback by 2'-6".

K. Exemption from Section 21-4.70 to exempt the landscape requirement for the parking area facing Young Street. This area will house an electrical transformer, approximately 36 inches in height, and a 4-foot clearance around the transformer is required by Hawaiian Electric Company.

L. Exemption from Chapter 18, Article 6, Section 18-6.2, ROH, Building Permit Fees, as amended, to allow exemption of the fees for building permits.

M. Exemption from the payment of real property taxes, in accordance with Chapter 8, Article 10, Section 8-10.20, ROH, Real Property Tax Building Permit Fees - Exemption - Low-income and Moderate-income housing, as amended.
N. Exemption from payment of the General Excise Tax on project development and construction costs related to the affordable rental apartment units.

O. Exemption from payment of the General Excise Tax on rental income from the affordable rentals and operating costs related to the affordable rental units.

P. Exemption for deferral of payment of Wastewater and Board of Water Supply connection fees until funding of Rental Housing Trust Fund Project Award loan is available.

Q. Exemption from Section 21-6.40(b) to allow maneuvering of vehicles within the parking area of the proposed project.
APPENDIX VIII

AGENCY COMMENTS ON THE DRAFT ENVIRONMENTAL ASSESSMENT AND THE APPLICANT'S RESPONSES
November 5, 2001

Sharyn Miyashiro
Housing & Community Development Corporation of Hawaii
677 Queen Street, Suite 300
Honolulu, Hawaii 96813

Attn: Lisa Wond

Dear Ms. Miyashiro:

Subject: Draft Environmental Assessment (EA)
          Artesian Vista Affordable Elderly Rental Apartments

We have the following comments to offer:

1. **Irrigation:**
   a. Will you use reclaimed water for the landscaping?
   b. Section III of the draft EA, Description of the Project, contains the statement: "Ground cover and grass areas will be zoned separately for water management." In the final EA please explain what this means.

2. **Solar heaters:** Will you use solar water heaters in this complex?

3. **Figure 2:** A large portion of this figure is annotated with dots. In the final EA add a legend or explanation of what the dots represent.

4. **Economic Impacts:** To balance out your discussion on economic impacts given in Section IV-B, please include a dollar figure total (or estimated total) of requested fee exemptions from the 201G application which are listed in Appendix VII.

If you have any questions call Nancy Heinrich at 586-4185.

Sincerely,

[Signature]

GENEVIEVE SALMONSON
Director

c: Keith Kurahashi
January 9, 2002

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

Attention: Ms. Nancy Heinrich

Subject: Draft Environmental Assessment (EA) for the Proposed Artesian Vista Affordable Elderly Rental Apartments
TMK: 2-8-002: 032

Dear Ms. Salmonson:

Thank you for your letter dated November 5, 2001, and your response to the Artesian Vista Affordable Elderly Rental Apartments Draft Environmental Assessment.

Our responses to your questions and statements are as follows:

1. Irrigation:

   a. Question - Will you use reclaimed water for the landscaping?  
      Answer - No, we will not be using reclaimed water for the landscaping.

   b. Question - Section III of the draft EA, Description of the Project, contain the statement "Ground cover and grass areas will be zoned separately for water management." In the final EA, please explain what this means.  
      Answer - The landscape sprinkler system will be divided into zones, meaning, separate watering schedules in order to conserve and better manage our water supply. This will be explained in our final EA.
2. **Solar Heating**

   Question - Will you use solar water heaters in this complex?
   Answer - No, we will not be using solar water heaters in this complex.

3. **Statement - Figure 2:** A large portion of this figure is annotated with dots. In the final EA add a legend or explanation of what the dots represent.

   Answer - The dots on Exhibit (Figure) 2 represent ‘commercial emphasis mixed use district’. Attached to this response is a legend showing how the Development Plan Land Use Map for the Primary Urban Center of the island outlines ‘mixed use districts’.

4. **Economic Impacts**

   Statement - To balance out your discussion on economic impacts given in Section IV-B, please include a dollar figure total (or estimated total) of requested fee exemptions from the 201G application which are listed in Appendix VII.

   Answer:
   a. Building Permit Fee - Approx. $21,000
   b. Real Property Tax - Approx. $30,000 per year
   c. GE project development - Approx. $300,000
   d. GE operation expense - Approx. $13,000 per year

   Again, thank you. Your comments and this response will be included in the Final EA.

   Very truly yours,

   Keith Kurahashi

   cc: Hawaii Housing Development Corporation
   Mr. Gary Furuta
January 18, 2002

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

Attention: Ms. Nancy Heinrich

Subject: Draft Environmental Assessment (EA) for the Proposed Artesian Vista Affordable Elderly Rental Apartments
 TMK: 2-8-002: 032

Dear Ms. Salmonson:

On January 9, 2002 we responded to your comments on the above Draft EA. In our response letter a typographical error was made, and at this time we would like to correct that error.

In response No. 3 regarding Figure (Exhibit) 2 of our Draft EA you questioned the dots shown on the exhibit. We responded that the dots, in relation to our project site, represented 'commercial emphasis mixed use district'. The correct answer should have been 'residential emphasis mixed use district'.

We apologize for the inconvenience this error may have caused you. Please do not hesitate to call me at 988-2231 should you have questions.

Very truly yours,

Anne Kusao

cc: Mr. Gary Furuta
November 26, 2001

Mr. Keith Kurahashi
Kusao & Kurahashi
2752 Woodlawn Drive, Suite 5-202
Honolulu, Hawaii 96822

Dear Mr. Kurahashi:

Draft Environmental Assessment
Section 201G-210 - Hawaii Revised Statutes
Affordable Housing - Artesian Vista Apartments
Tax Map Key 2-8-2: 32

Thank you for the opportunity to review and comment on the above Draft Environmental Assessment prepared for the Artesian Vista Apartments.

The Department of Planning and Permitting is processing an application, pursuant to Chapter 201G, Hawaii Revised Statutes, for the affordable housing project. Therefore, the potential impacts and other issues relating to proposed exemptions from various zoning development standards, city fees and park dedication regulations will also be further evaluated in our review of the project. We have no other comments at this time.
Mr. Keith Kurahashi  
Page 2  
November 26, 2001  

Should you have any questions, please contact Sharon Nishiura of our staff at 523-4256.

Sincerely yours,

[Signature]

RANDALL K. FUJIKI, AIA  
Director of Planning and Permitting

RKF:fm  
cc: Office of Environmental Quality Control  
    Housing Community Development Corporation of Hawaii

DN 127142
December 20, 2001

Mr. Randall K. Fujiki, AIA  
Director, Department of Planning and Permitting  
City and County of Honolulu  
650 S. King Street, 7th Floor  
Honolulu, Hawaii 96813

Attention: Ms. Sharon Nishiura, Staff Planner

Subject: Draft Environmental Assessment (EA) for the Proposed Artesian Vista Affordable Elderly Rental Apartments  
TMK: 2-8-002: 032

Dear Mr. Fujiki:

Thank you for your letter dated November 26, 2001, and for taking the time to review and comment on our Draft EA for the proposed Artesian Vista Affordable Elderly Rental Apartments. We appreciate your comment that the potential impacts and other issues relating to proposed exemptions from various zoning development standards, city fees and park dedication regulations will be evaluated in your review of the 201G application currently being processed by your department.

Again, thank you. Your comments and this response will be included in the Final EA.

Very truly yours,

Keith Kurahashi

cc: Hawaii Housing Development Corporation  
Mr. Gary Furuta
Kusao & Kurahashi, Inc.
2752 Woodlawn Drive, Suite 5-202
Honolulu, Hawaii 96822

Attention: Keith Kurahashi

Gentlemen:

Subject: Your Transmittal of October 29, 2001 of the Draft Environmental Assessment for the Artesian Vista Affordable Elderly Rental Apartments, McCully, Oahu, TMK: 2-8-02: 32.

Thank you for the opportunity to review the subject document for the proposed apartment development.

We have the following comments to offer:

1. The existing off-site water system is presently adequate to accommodate the proposed project.

2. The availability of water will be determined when the Building Permit Application is submitted for our review and approval. If water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

3. There are no water services to the project site.

4. If a three-inch or larger water meter is required, the construction drawings showing the installation of the meter should be submitted for our review and approval.
5. The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

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 Scot Muraoka at 527-5221.

Very truly yours,

[Signature]

for CLIFFORD S. JAMILE
Manager and Chief Engineer

cc: Office of Environmental Quality Control
Housing Community Development Corporation of Hawaii
December 20, 2001

Mr. Clifford S. Jamile  
Manager and Chief Engineer  
Board of Water Supply  
City and County of Honolulu  
630 So. Beretania Street  
Honolulu, Hawaii 96813

Attention: Mr. Scott Muraoka

Subject: Draft Environmental Assessment (EA) for the Proposed Artesian Vista Affordable Elderly Rental Apartments  
TMK: 2-8-002: 032

Dear Mr. Jamile:

Thank you for your letter dated November 28, 2001, and for taking the time to review and comment on our Draft EA for the proposed Artesian Vista Affordable Elderly Rental Apartments.

The following are our responses to your recommendations and comments:

1. We understand and appreciate the fact that the off-site water system is presently adequate to accommodate the proposed development.

2. We further understand that the availability of water will be confirmed when the building permit application is submitted for your review and approval and that when water is made available, the applicant will be required to pay your Water System Facilities charges for resources and development, transmission and daily storage. We have, however, requested a deferral of the water system facilities charges until we are able to make our first draw from the Rental Housing Trust Fund Loan, which we expect will occur within a month after building permit approval.
3. We are aware that no water services currently service the project site.
4. If a three-inch or larger meter is required, construction drawings showing the installation of the meter will be submitted for your review and approval.
5. The on-site fire protection requirements will be co-ordinated with the Fire Prevention Bureau of the Honolulu Fire Department.
6. We understand that the proposed project is subject to Board of Water supply cross-connection control requirements prior to the issuance of the building permit application.

Again, thank you. Your comments and this response will be included in the Final EA.

Very truly yours,

Keith Kurahashi

Keith Kurahashi

cc: Hawaii Housing Development Corporation
    Mr. Gary Furuta
November 30, 2001

Mr. Keith H. Kurahashi
Kusao & Kurahashi, Inc.,
1314 S. King Street, Suite 1263
Honolulu, Hawaii 96814

Dear Mr. Kurahashi:

Subject: Draft Environmental Assessment (EA) for the Proposed
Affordable Elderly Rental Apartment Known as Artesian Vista Apartments
TMK: 2-8-002: 032

We received your letter dated October 29, 2001, regarding the Draft Environmental Assessment for the proposed Artesian Vista Apartments. The proposed development will not have an adverse impact on the services provided by the Honolulu Fire Department.

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

AKL/SD:jo

cc: Office of Environmental Quality Control
Sharyan L. Miyashiro, Housing Community Development Corporation of Hawaii
December 20, 2001

Mr. Attilio K. Leonardi
Chief, Honolulu Fire Department
3375 Koapaka Street, Suite H425
Honolulu, Hawaii 96819

Subject: Draft Environmental Assessment (EA) for the Proposed Artesian Vista Affordable Elderly Rental Apartments
          TMK: 2-8-002: 032

Dear Chief Leonardi:

Thank you for your letter dated November 30, 2001, and for taking the time to review and comment on our Draft EA for the proposed Artesian Vista Affordable Elderly Rental Apartments. We appreciate your comment that the proposed development will not have an adverse impact on the services provided by the Honolulu Fire Department.

Again, thank you. Your comments and this response will be included in the Final EA.

Very truly yours,

Keith Kurahashi

cc: Hawaii Housing Development Corporation
    Mr. Gary Furuta
December 10, 2001

Kusao and Kurahashi, Inc.
Planning and Zoning Consultants
2752 Woodlawn Drive, Suite 5-202
Honolulu, Hawaii 96822

Dear Sirs:

This letter concerns the Artesian Vista Affordable Elderly Rental Apartment Development, Honolulu, Oahu, Hawaii, TMK: 2-8-002: 032, which is proposed to be built at the corners of Young and Artesian Streets in the McCully-Moiliili area. The Draft Environmental Assessment (DEA) for the project is dated October 2001.

This is Leslie Au, who regularly reviews and comments on Draft Environmental Assessments for the Department of Health in my capacity as a toxicologist with the Hazard Evaluation and Emergency Response (HEER) Office. Moreover, as a lifelong resident of Artesian Street, there are a few important things about this proposed development which were not mentioned in the DEA and which should be accounted for by the developers, in order to protect the health and safety of the future elderly residents.

First, the Artesian Vista site is directly downwind of ABC Auto body and Paint Company, which is about 50 feet north with only a small one-story residence intervening. Auto paint contains volatile chemicals such as toluene and xylenes which are hazardous to health. The vapors are very hazardous to elderly people, especially those who might breathe these vapors repeatedly, several days a week, year-round.

Auto paint businesses are scattered throughout Moiliili and Kalihi, and the DOH’s HEER Office and Clean Air Branch have responded to complaints from the downwind neighbors at nearly all of them. ABC Auto Body and Paint has been in business at that location for at least 30 years but has generated no complaints, partly because of the vacant parking lot downwind, which would now be replaced by Artesian Vista Elderly Rental Apartments. Page 15 of the DEA mentions that the apartment building will have “split system air conditioning,” and if the air intakes point upwind at ABC Auto Body or an elderly resident opens a window, the residents could be exposed to hazardous chemical vapors. Artesian Vista’s design should take ABC’s presence into account, especially the placement of its vents and windows. Furthermore, ABC’s presence should be disclosed to each potential elderly resident of Artesian Vista.

Second, the Draft Environmental Assessment (DEA, page 25) says that only 23 parking
stalls will be needed, and elderly residents’ need for vehicles will be minimized because
of the nearby Times Supermarket and major bus lines on Beretania Street and King
Street, as well as nearby restaurants, stores, banks, and doctors’ offices. However, it will
be very difficult for elderly people to walk in this neighborhood. This block is old with
no sidewalks, and Artesian Street is narrow and only 2 lanes wide (see Appendix IV,
Photographs of Site, No. 7, “Looking North on Artesian Street” -- the parking lot on the
left is where the Artesian Vista would be). An elderly resident wishing to walk north to
the Beretania Street bus stop would have to risk walking in the street to get around the
cars parked in front of the neighboring residence and ABC Auto Body. In the photo, you
will see a white car facing you, parked in the street beside a tree. Directly across the
street from the white car is the driveway to Artesian Plaza with its Kapiolani Hospital
Women’s Clinic, which generates a fair amount of elderly-hazardous traffic turning into
Artesian Street from Beretania Street.

Turn to Photograph No. 4, “Looking West Along Young Street.” The Times
Supermarket is in that direction. The Artesian Vista would be in the right foreground.
An elderly resident wishing to go to Times Supermarket would find no paved sidewalk,
but only slippery grass and uneven ground which would be impossible to negotiate for
any elderly person using canes or a walker.

Walking south to the King Street bus stop or taking an alternate route to the Times
Supermarket, an elderly resident would cross Young Street. There are no crosswalks in
this area -- see Photographs No. 4, 5, 6, and 7. Furthermore, there are two routes
westward to Punahou Street, which then leads northward to Dole Street and an entrance
to H-1 Freeway; one route is westward on Beretania, and the other is westward on Young
Street, which is the preferred route due to the absence of stop signs or lights in the stretch
between McCully Street and Punahou Street. The “traffic study” cited in this DEA was
done during a sunny-day rush hour. On rainy days, H-1 traffic slows, and all the
approaches to the Dole Street freeway entrance become congested, and the elderly-
hazardous traffic backs up to the Artesian Vista area seen in Photograph No. 4.

Thank you for the opportunity to comment on this project. If you have further questions,
please call me at 586-7539.

Sincerely,

Leslie K.L. Au

LESLEY K.L. AU
Toxicologist, HEER Office

C. DBEDT, Housing and Community Development Corp. of Hawaii, 677 Queen St.,
Honolulu 96813, attn: Lisa Wond
December 31, 2001

Bruce S. Anderson, Ph.D., M.P.H
Director, Department of Health
State of Hawaii
P.O. Box 3378
Honolulu, Hawaii 96801

Attention:  Mr. Leslie K. L. Au
Toxicologist, HEER Office

Subject:  Draft Environmental Assessment (EA) for the Proposed Artesian Vista Affordable Elderly Rental Apartments
TMK: 2-8-002: 032

Dear Dr. Anderson:

Thank you for your letter dated November 10, 2001, and your response to the Artesian Vista Affordable Elderly Rental Apartments Draft Environmental Assessment.

The following are our responses to your comments:

Comment - "First, the Artesian Vista site is directly downwind of ABC Auto Body and Paint Company, which is about 50 feet north with only a small one-story residence intervening. Auto paint contains volatile chemicals such as toluene and xylenes which are hazardous to health. The vapors are very hazardous to elderly people, especially those with might breathe these vapors repeatedly, several days a week, year-round...."

Response - The proposed elderly affordable apartment use is a permitted use in this AMX-2 Apartment Mixed Use District. As you stated in your letter, ABC Auto Body and Paint Company has been in business at its location for at least 30 years, and has generated no complaints from the surrounding single family home residents nor the many high rise apartment building..."
residents nearby. We understand that, should a complaint be filed regarding emissions from the ABC Auto Body and Paint Company, the Department of Health (DOH) would monitor the site and have ABC Auto Body and Paint Company take corrective action to ensure compliance with air quality standards established by DOH. We would also like to point out that should ABC Auto Body and Paint Company exceed the DOH air quality standards, not only would it be a concern for the residents of the proposed Artesian Vista Apartments, it would also be a concern to any other private developer of this property and to existing surrounding neighbors.

Comment - "Second, the Draft Environmental Assessment (DEA, page 25) says that only 23 parking stalls will be needed, and elderly residents’ need for vehicles will be minimized because of the nearby Times Supermarket and major bus lines on Beretania Street and King Street, as well as nearby restaurants, stores, banks, and doctors’ offices. However, it will be very difficult for elderly people to walk in this neighborhood. This block is old with no sidewalks, and Artesian Street is narrow and only 2 lanes wide....."

Response - When developed all roadway improvements including sidewalks will be provided on the frontage of the subject property. Additional improvements will be a 7-foot road widening on Young Street and a 30-foot property line radius (corner rounding) at the intersection of Young Street and Artesian Street. Please refer to site plan in Appendix I of the Draft EA. Residents will be able to cross the street to walk to Times Supermarket in the ewa direction (approximately 140 feet away) along the makai side of Young Street which has sidewalks all the way to Times. We agree that on the mauka side of Young Street sidewalks occur intermittently, ewa of the project site, however, we do not expect this to be a major travel route for senior pedestrians from the Artesian Vista. On both sides of Artesian Street between Young Street and Beretania Street (upon completion of the project) there will be sidewalks except for short breaks fronting the ABC Auto Body and Paint Company on the ewa side and a residence on the kokohead side, where pedestrians will have to travel over a grassed or graveled pathway. On the kokohead side of Artesian Street between Young Street and King Street there are no existing sidewalks, and on the ewa side of Artesian Street, at this location, there is a existing sidewalk starting at the
corner of Young and Artesian extending approximately 1/3 of the way down Artesian Street to King Street. The mauka and makai side of Young Street kokohead of the project site between Artesian Street and McCully Street has existing sidewalks. For the most part the important pedestrian routes contain sidewalks that are in place surrounding the project site or are planned with the development of Artesian Vista. Please refer to the enclosed photographs.

Again, thank you. Your comments and this response will be included in the Final EA.

Very truly yours,

Keith Kurahashi

cc: Hawaii Housing Development Corporation
Mr. Gary Furuta
Photo No. 1  View of ewa/makai side of Young Street with sidewalks all the way to Times Super Market. When developed sidewalks will be provided, fronting subject property, where grassed area now exists

Photograph No. 2  View of Young Street facing kokohead showing the mauka and makai sidewalks all the way to McCully Street
Photograph No. 3  View from Beretania Street looking down Artesian Street to Young Street showing existing sidewalks on the kokohead side of Artesian Street.

Photograph No. 4  View from entrance to project site looking up towards Beretania Street showing existing sidewalks.
Photograph No. 5  View of Artesian Street, between Young and King Street showing existing sidewalk on the ewa side of the street

No. 6  View of Artesian Street, from entrance to project site, looking down to Young Street and on to King Street. When developed sidewalks will be provided, fronting subject property, where cars are parked on the right-hand side of the photograph
Mr. Keith H. Kurahashi  
Kusao & Kurahashi, Inc.  
2752 Woodlawn Drive, Suite 5-202  
Honolulu, Hawaii 96822  

Dear Mr. Kurahashi:

Subject: Artesian Vista Apartments

In response to your October 29, 2001 letter, the draft environmental assessment (EA) for the subject project was reviewed. The following comments are the result of this review:

1. The proposed project includes only one undersized loading stall. As a residential development, it is expected that larger vehicles, such as moving trucks and furniture delivery trucks, would service the building. Therefore, adequate loading and maneuvering space should be provided on-site. The off-street loading area should not require vehicles to back out into the street.

2. The second paragraph on Page 26 of the draft EA states that a van accessible loading space will be located in the parking lot to accommodate TheHandi-Van vehicle. TheHandi-Van vehicles will pickup/drop-off at the curbside of Young Street only. The proposed van accessible loading space does not appear to be able to accommodate a deployed lift. The subject project must meet or exceed the minimum Americans with Disabilities Act accessibility requirements.

3. Accessible pedestrian paths, along Artesian, Beretania and King Streets, to and from the bus stops should be discussed in the report.
Mr. Keith H. Kurahashi  
December 26, 2001  
Page 2

Should you have any questions regarding these comments, please contact Faith Miyamoto of the Transportation Planning Division at 527-6976.

Sincerely,

[Signature]

CHERYL D. SOON  
Director

cc: Ms. Genevieve Salmonson  
Office of Environmental Quality Control

Ms. Sharyn Miyashiro  
Housing Community Development Corporation of Hawaii
January 10, 2002

Ms. Cheryl D. Soon
Director
Department of Transportation Services
City and County of Honolulu
711 Kapiolani Blvd., Suite 1200
Honolulu, Hawaii 96813

Attention: Ms. Faith Miyamoto

Subject: Draft Environmental Assessment (EA) for the Proposed Artesian Vista Affordable Elderly Rental Apartments
         TMK: 2-8-002: 032

Dear Ms. Soon:

Thank you for your letter dated December 26, 2001, and your response to the Artesian Vista Affordable Elderly Rental Apartments Draft Environmental Assessment.

Our responses to your questions and statements are as follows:

1. The loading space provided will measure 19' x 8.5' in size which will meet the minimum LUO standard for a smaller loading stall. The off-street loading area will not require vehicles to back out into the street, as adequate space is available for vehicles to exit the parking area in the proper manner. Please refer to Site Plan in Appendix I of the Draft EA. The experience of our property management company, Prudential Locations, Inc., in managing similar senior affordable rental apartments, and our own experience in operating Westeria Vista and Kalakaua Vista, both of which have loading spaces similar to that being proposed, is that large moving vehicles are not normally utilized by the residents. The apartments are furnished with all the necessary major appliances such as refrigerator, stove and
dishwasher, and laundry facilities are offered within the building itself. It is our experience that at time of move-in and/or move-out, family and friends are there to assist the senior resident in the moving of personal furnishings, primarily with personal vehicles.

2. We will correct the second paragraph on Page 26 of the draft EA to state that TheHandi-Van will pickup/drop-off at the curbside of Young Street only. The project will meet the minimum Americans with Disabilities Act accessibility requirements.

3. When developed all roadway improvements including sidewalks will be provided on the frontage (Young Street and Artesian Street) of the subject property. On both sides of Artesian Street, between Young Street and Beretania Street (upon completion of the project) there will be sidewalks except for short breaks fronting the ABC Auto Body and Paint Company on the ewa side and a residence on the kokohead side, where pedestrians will have to travel over a grassed or graveled pathway. On both sides of Artesian, between Young Street and King Street there are a mixture of sidewalks and grassed or graveled pathways. The kokohead side of Artesian Street at this location has a grassed or graveled pathway between Young Street and King Street. The ewa side of Artesian Street, at this location, has an existing sidewalk starting at the corner of Young and Artesian Street extending approximately 1/3 of the way down Artesian Street to King Street. The remainder of the way down to King Street is a mixture of grassed and gravel pathway.

Again, thank you. Your comments and this response will be included in the Final EA.

Very truly yours,

Keith Kurahashi

cc: Hawaii Housing Development Corporation
    Mr. Gary Furuta