November 4, 1996

TO: MR. GARY GILL, DIRECTOR
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

FROM: KAZU HAYASHIDA, DIRECTOR OF TRANSPORTATION

SUBJECT: FINDING OF NO SIGNIFICANT IMPACT AND FINAL ENVIRONMENTAL ASSESSMENT FOR A COMMUNICATION SITE, WILSON TUNNEL, LIKELIKE HIGHWAY, FASP NO. S-0630(1)

We have reviewed the comments received during the 30-day public comment period which began on July 23, 1996. We have determined that this project will have no significant environmental impact and request that you publish this FONSI and the Final Environmental Assessment in your next OEQC Bulletin.

We enclose a completed OEQC Bulletin Publication Form and four copies of the Final Environmental Assessment. If you have any questions, please call Michael Amuro at 587-2023.

Enclosures
FINAL ENVIRONMENTAL ASSESSMENT FOR A COMMUNICATIONS SITE
ON THE NUIANU SIDE OF THE WILSON TUNNEL

BACKGROUND

The applicants are PrimeCo Personal Communications L.P., Pocket Communications Inc., Western PCS II Inc., and Hawaii Wireless Inc. They are proposing to construct a transmitter/receiver installation between the entrance and exit bores on the Nuianu side of the Wilson Tunnel. The installation will be used to facilitate PCS wireless telephone communications and paging on the Honolulu approach to the Tunnel and within the tunnel itself.

The applicants had approached the State Department of Transportation (DOT) individually for permission to locate their sites to serve the tunnel area. It was decided, jointly with the DOT, that a single application should be made that included all the companies involved. This approach would better minimize any environmental and visual aesthetic impacts that might be caused by the installation. The companies have been meeting with the DOT for several months and are proposing the design which is the subject of this Environmental Assessment (EA).

DESCRIPTION OF THE PROPOSED PROJECT

The installation will be constructed between the two bores on Nuianu side of the tunnel which extend beyond the face of the mountain. Four equipment cabinets will be located behind a new 6 1/2 foot high cement block wall approximately 50 feet long. Twelve antennas panels approximately 5 feet long and 6 inches wide will be mounted on two inch diameter pipes attached to the wall at intervals of approximately three feet. The top of the antennas will be approximately 10 feet above the new wall. The applicants have been requested by the DOT to provide space for an additional four antennas if they should be required in the future by another carrier. These antennas will provide telephone service on the road approaching the tunnels.

Communication inside the tunnels will be provided by five "yagi" antennas three feet long with an approximate width of six inches. These antennas will be mounted in a row in the upper corner of each bore pointing towards Kaneohe. The bores will serve as a "wave guide" and direct the transmissions through the tunnel.

Access to the installation will be provided by an eight foot diameter circular staircase installed between the Honolulu bound lanes and the existing building located between the two bores.

The installation is located on State land in the highway right of way.
AFFECTED ENVIRONMENT

The primary installation which includes the 12 panel antennas and the equipment cabinets will be located above the existing brick facing between the two bores on the Honolulu side of the Wilson tunnel. The areas affected are the exterior face of the tunnel, the approach and exit lanes, and to some extent the interior of the bores.

IMPACTS AND ALTERNATIVES CONSIDERED

a. Impacts

The primary impact of the installation will be the visual impact of the 12 panel antennas, the 6 1/2 foot high fifty foot long extension wall above the existing wall, and the circular staircase between the existing building and the Honolulu lanes. These will be visible only to occupants of cars approaching the tunnel from Honolulu. Occupants of automobiles exiting the tunnel Honolulu bound will be beyond these structures by the time they are able to see them.

The area above and between the bores is generally flat, however some grubbing and leveling will be needed to accommodate the cement slab on which the equipment cabinets will be placed.

There have been concerns expressed about the effects of the electromagnetic radiation from the antennas. There is no impact as the radiation exclusion distance for the panel antennas is 7.2 feet. This contour is well above the height of any vehicles utilizing the tunnels.

b. Alternatives

Other possible sites for the antenna installation along the side of the highway were reviewed. They were rejected in favor of the proposed site for the following reasons:

1. They were in the conservation district outside of the highway right of way.

2. They were in the right of way but would have been more visually intrusive.

3. Electrical power was not readily available.

4. A land line telephone connection into the Hawaiian Telephone system was not readily available.
5. Telephone service could not be supplied inside the tunnels.

6. None of the other locations provided the opportunity for all the companies to co-locate, thereby minimizing the cumulative impact of multiple installations.

If the project is not constructed it will not be possible for the four applicant companies to supply continuous communications coverage as users transition from Windward Oahu to Honolulu and from Honolulu to Windward Oahu through the Wilson tunnel. There would also be signal degradation on the Honolulu approach to the tunnel.

The telephone systems involved serve a community function as public utilities by supplying needed portable communications for public use. In addition to assisting the general public and businesses the systems will provide essential communications in the event of disaster.

The ability for real time portable communications for occupants of cars transiting over Likelike will assist greatly in providing a safe environment for the residents of Oahu. Travelling over the Likelike highway at night can be frightening and dangerous in the event of a breakdown. The ability to call for assistance immediately without leaving the car will contribute to the safety, and the physical and mental well being of those who must travel this road at night.

MITIGATION MEASURES

The new CMU wall will have a brick facade to match the exiting wall and The antennas will be painted to match the natural background. The staircase will be visually screened for most of its height from occupants of automobiles Kaneohe bound by an existing tree.

All construction will be done utilizing "best management practices". This means that there will be no runoff from the small amount of grubbing and grading that will be required to prepare the site for the new wall and the pad for the equipment cabinets.

The existing entrance to the two bores presently consists of a number of structures. A brick facade wall extends across the entire face of the tunnel entrance. There is a portal building located between the two bores. In front of the portal building is a parking lot. The addition of the structures described in this EA, which are designed to blend in with the existing facility, will not materially impact the current visual impression of the tunnel entrance.
The installation will be secured from the public and will only be accessible to maintenance personnel.

COMMENTS RECEIVED ON THE DRAFT ENVIRONMENTAL ASSESSMENT

The draft EA was published in the July 23, 1996 OEQC Bulletin. Copies of the EA were submitted for review and comment to the State Department of Transportation, City and County of Honolulu Planning Department, State Historic preservation Division of the Department of Land and Natural Resources, and the State Department of Health. The following comments were received:

1. City and County of Honolulu Planning Department

"...we have reviewed the subject draft EA and attached material and have no objection to the proposed project at this time."

2. State Historic Preservation Division of the Department of Land and Natural Resources.

"Although the tunnel was completed in 1961, it may meet the criteria as an exceptional example of engineering accomplishment in Hawaii. We believe that the project as designed could be screened from view, and does not effect any original material. We believe that the proposed project will have 'no effect' on any known historic sites."

COMMENT

The new CMU wall will be constructed with a brick facade that matches the existing wall. The circular staircase will be screened from view by trees and landscaping. It is not feasible to screen the antennas because of interference with the antenna signals, however they will be painted in such a manner as to blend visually with the natural background.

3. Office of Environmental Quality Control

(a) "If this project is in the conservation district list the status of the Conservation district Use Permit."

COMMENT

The project is in the Highway right of way and not subject to a CDUP.

(b) Include "a description of the four equipment cabinets or, preferably, a drawing that shows the
physical dimensions."

COMMENT

The cabinets for each of the four applicants have different dimensions. The dimensions for each applicant's cabinets are as follows:

<table>
<thead>
<tr>
<th>Cabinet</th>
<th>Length</th>
<th>Width</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>PrimeCo</td>
<td>8</td>
<td>2.5</td>
<td>6</td>
</tr>
<tr>
<td>Hawaiian Wireless</td>
<td>8</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Western Wireless</td>
<td>5</td>
<td>2.5</td>
<td>5</td>
</tr>
<tr>
<td>Pocket Communications</td>
<td>4.5</td>
<td>2.5</td>
<td>6</td>
</tr>
</tbody>
</table>

All cabinets will be located behind the CHU wall and hidden from view.

(c) Provide "(T)he anticipated start and stop dates of this project."

COMMENT

Construction will start as soon after the negative declaration is issued as building permits can be obtained from the City. This could be as early as September 20, 1996. Construction time is estimated to be not longer than two weeks. A reasonable completion date, given the uncertainties of permit approvals, is estimated to be October 30, 1996.

(d) Include "(A) discussion of the flora and fauna resources in the area and appropriate mitigation measures to prevent disturbance of them or their habitats."

COMMENT

No natural flora or fauna will be disturbed. The area where the cabinets, the new wall, and the antennas will be located is planted in grass which is maintained by the State.

(e) Include "(A) discussion of traffic impacts during the construction period and appropriate mitigation measures."

COMMENT

Except for installation of the Yagi antennas at the
entrance to the tunnels all construction is outside of the travelways and will not interfere with traffic flow. If there is a need to alter the traffic flow it will be done at night and in concurrence with accepted DOT procedures.

The Department of Health did not respond.

DETERMINATION AND REASONS SUPPORTING THE DETERMINATION

The proposed project would not have a significant effect on the environment and therefore preparation of an environmental impact statement is not required. The "significance criteria," Section 12 of Hawaii Administrative Rules Title 11, Chapter 200, "Environmental impact Statement Rules," were reviewed and analyzed. Based on the analysis, the following were concluded:

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

   All construction is located in previously disturbed land and no natural of cultural resources are present.

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

   The project will occupy only a very small area of land non of which is currently in any significant environmental use.

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

   Conservation of natural resources and enhancement of the quality of life are the two broad policies of the "State Environmental Policy" in Chapter 344 of the Hawaii Revised Statutes. The proposed project does not consume any natural resources. It will enhance the quality of life by enabling residents to communicate by telephone while transiting the Koolau's via Likelike Highway. The system will provide essential communications in the event of disaster and provide for emergency communications for stranded motorists. The ability to call for assistance will contribute to the safety, and the physical and mental well being of those who must travel over Likelike Highway, especially at night.

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

   The economic and social well being of the community will be enhanced by the increase in communication
services that will be provided by these systems.

5. The proposed action does not substantially affect public health.

There is no public health impact caused by these systems. The radiated power for the antenna systems will range between 60 to 100 watts. This is equivalent to the radiation emitted by standard household electric light bulbs. The exclusion distance for the Land Use Ordinance allowable power for human contact of 0.1 milliwatts per square centimeter is 7.2 feet. No automobiles will be within 7.2 feet of a transmitting antenna. Further, the Federal standards for human radiation tolerance is 0.5 milliwatts per square centimeter which is five times that allowed by the LUO.

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

Provision of the communication services made possible by this installation will have no impact on population changes or public facilities.

7. No substantial degradation of environmental quality is anticipated.

No degradation of the environment is anticipated. The project area has already been extensively altered during construction of the tunnels.

8. The proposed action does not involve a commitment to larger actions, nor would cumulative impacts result in considerable impacts on the environment.

The project is self contained and independent of any other installations. Provision is being made as a part of this project review for the possible inclusion of two other communications facilities.

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

The area involved with this project is very small and previously has been extensively altered. There are no endangered or threatened species or their habitats on the property.

10. Air quality, water quality, or ambient noise levels would not be detrimentally affected.
In operation this is a passive facility. It does not impact air quality, does not use water, and does not generate any noise.

11. 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 area is not on or near any of the above areas of concern.
August 15, 1996

Mr. Donald Clegg, President
Analytical Planning Consultants, Inc.
84 N. King Street
Honolulu, Hawaii 96817

Dear Mr. Clegg:

SUBJECT: Cellular PCS Transmitter/Receiver Site
Wilson Tunnel
TMK 1-4-18, Kaliihi-Uka, Honolulu, Oahu

Thank you for the letter dated August 2, 1996, regarding the location of a cellular PCS transmitter/receiver site at the Kalihi side of the Wilson Tunnel. Although, the tunnel was completed in 1961, it may meet the criteria as exceptional example of engineering accomplishment in Hawaii. We believe that the project as designed could be screened from view, and does not effect any original material. We believe that the proposed project will have ‘no effect’ on any known historic sites.

Thank you opportunity to comment. Should you have any questions please call Carol Ogata at 587-0004.

Aloha,

DON HIBBARD, Administrator
State Historic Preservation Division

CO:jk
November 17, 1996

Mr. Don Hibbard, Administrator
State Historic Preservation Division
Department of Land and Natural Resources
State of Hawaii
33 So King Street 6th floor
Honolulu, HI 96817

Dear Mr. Hibbard,

This is in response to your comment regarding the location of a cellular communications site at the Kalihi side of the Wilson Tunnel.

The new CMU wall will be constructed with a brick facade that matches the existing wall. The circular staircase will be screened from view by trees and landscaping. It is not feasible to screen the antennas because of interference with the antenna signals, however they will be painted in such a manner as to blend visually with the natural background.

If there are any questions please contact me at 536-5695.

Sincerely,

Donald Clegg
President
August 15, 1996

Mr. Donald Clegg, President
Analytical Planning Consultants, Inc.
84 N. King Street
Honolulu, Hawaii 96817

Dear Mr. Clegg:

Draft Environmental Assessment (EA) for a
Communication Site at the Wilson Tunnel, Honolulu, Oahu, Hawaii

In response to your letter of August 2, 1996, we have reviewed the subject draft EA and attached material and have no objections to the proposed project at this time.

Thank you for the opportunity to comment on this matter. Should you have any questions, please contact Tim Hata of our staff at 527-6070.

Sincerely,

Cheryl D. Soon
Chief Planning Officer

CC: State Department of Transportation
November 17, 1997

Mrs. Cheryl Soon  
Chief Planning Officer  
City and County of Honolulu  
650 So. King Street 8th floor  
Honolulu, Hi. 96813

Dear Mrs. Soon,

This will acknowledge your comment on the draft Environmental assessment that you have no objections to the construction of a cellular communications site at the Kalihi end of the Wilson Tunnel.

If there are any questions please contact me at 536-5695.

Sincerely,

[Signature]  
Donald Clegg
Mr. Donald Clegg  
President  
Analytical Planning Consultants, Inc.  
84 North King Street  
Honolulu, Hawaii  96817

Dear Mr. Clegg:

Thank you for allowing us to review and comment on the Environmental Assessment for a cellular PCS transmitter/receiver site for the Wilson Tunnel. We do not have any comments at this time.

Sincerely,

BRUCE S. ANDERSON, Ph.D.  
Deputy Director for Environmental Health
July 2, 1996

Mr. Kazu Hayashida, Director
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, HI 96813

Dear Mr Hayashida

PrimeCo Personal Communications LP, Pocket Communications Inc., Western PCS II Inc, and Hawaii Wireless Inc. are applying to the State Department of Transportation for permission to co-locate a transmitter/receiver site for cellular PCS telephone service at the Honolulu side of the Wilson Tunnel. The proposed installation is on state land therefore Chapter 343 HRS requires that an Environmental Assessment (EA) must be submitted for publication in the OEQC Bulletin. Accordingly, the enclosed Environmental Assessment is being submitted for review.

Based on the EA analysis we are requesting that the DOT issue a negative declaration for the proposed installation.

If there are any questions please contact me at 536-5695.

Sincerely,

Donald Clegg
President
OVERSIZED DRAWING/MAP

PLEASE SEE 35MM ROLL

0038
OVERSIZED
DRAWING/MAP

PLEASE SEE
35MM ROLL

0039