MEMORANDUM

TO: Office of Environmental Quality Control

FROM: William W. Paty, Chairperson
Board of Land and Natural Resources

SUBJECT: Document for Publication in the OEQC Bulletin - Environmental Assessment for Conservation District Use Application KA-4/12/91-2459 for a Telecommunication Facility, Hanalei, Kauai TMK: 5-4-01: Por. 1

The above-mentioned Chapter 343 Document was reviewed, and a negative declaration was declared based upon the environmental assessment provided with the CDUA.

Please call me or Edward Henry of our Office of Conservation and Environmental Affairs, at 548-7837, if you have any questions.

Attachment
STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
P. O. BOX 621  
HONOLULU, HAWAII  96809  

DEPARTMENT MASTER APPLICATION FORM  

1. LANDOWNER/WATER SOURCE OWNER  
   (If State land, to be filled in by Government Agency in control of property)  
   Name:  
   Dept. of Land and Natural Resources  
   Address: P. O. Box 621  
   Honolulu, HI 96809  

2. APPLICANT (Water Use, omit if applicant is landowner)  
   Name: Cybertel Corporation  
   c/o Valton D. Y. Hong  
   3135-A Akahi Street  
   Lihue, HI 96766  

3. SIGNATURE  
   Telephone No. 245-4757  
   Interest in Property: Lessee  
   Signature:  
   Date:  

4. TYPE OF PERMIT(S) APPLYING FOR  
   ( ) A. State Lands  
   ( ) B. Conservation District Use  
   ( ) C. Withdraw Water From A Ground Water Control Area  
   ( ) D. Supply Water From A Ground Water Control Area  
   ( ) E. Well Drilling/Modification  

5. WELL OR LAND PARCEL LOCATION REQUESTED  
   District: Hanalei  
   Island: Kauai  
   County: Kauai  
   Tax Map Key: 5-4-OL, ror. 01  
   Area of Parcel: 11,824 acres  
   Term (if lease):  

- 1 -
V. ENVIRONMENTAL REQUIREMENTS

An environmental impact assessment of the proposed use is attached hereto as Appendix "A" and made a part hereof, showing the following:

(1) Identification of Applicant:

Cybertel Corporation  
c/o Walton D. Y. Hong  
P. O. Box 1727  
Lihue, HI 96766  
Tel. 245-4757

(2) Identification of Approving Agency:

Department of Land and Natural Resources  
State of Hawaii  
P. O. Box 621  
Honolulu, HI 96809

(3) Identification of agencies consulted:

Department of Land and Natural Resources  
State of Hawaii  
P. O. Box 621  
Honolulu, HI 96809

Planning Department  
County of Kauai  
4280 Rice Street  
Lihue, HI 96766

(4) General description of action's characteristics:

(a) Technical: The site will act as an active repeater site for the Applicant's cellular telephone network to service the North Shore of Kauai. The site will allow the Applicant to receive and transmit strengthened signals between the Applicant's Kilohana Crater cell and the Applicant's proposed cell at the present location of the Princeville Nursery.

The proposed repeater station will operate at the 2 gigahertz (GHz) band due to less susceptibility of frequencies in that band and to weather related signal outages.
The proposed action consists of attaching an active microwave repeater station for a cellular telephone system unto the legs of an existing electrical transmission tower. The repeater station will consist of two (2) microwave dishes, an electronics cabinet, a photovoltaic or solar generating unit, and a battery box. Each microwave dish will be a solid dish, approximately 6 feet in diameter.

The dishes will be placed approximately 25 feet above the ground on the 60 foot tower. This level is necessary to clear the height of surrounding vegetation and to prevent ground level interference. While the tower is in a remote location, Kauai Electric personnel visit the site on occasion for inspection, repair and maintenance.

As the lowest existing electrical lines on the tower are approximately 42 feet above the ground, there would still be adequate spacing between the proposed dishes and the lines.

The electronic cabinet would be affixed to the base of the tower. The cabinet would be approximately 2' by 3' by 1' in depth.

Mounted immediately above the electronic cabinet would be the photovoltaic or solar panel, measuring approximately 4 feet by 6 feet by 1 3/4 inches in thickness. This panel would be mounted 35 degrees to the horizon, and would supply electrical power for the repeater station during the daylight hours and charging capacity for the batteries required during night use. Minimal repairs and maintenance of the station would be required due to the trouble-free nature of the photovoltaic panel as a power source.

A battery box would be located below the electronic cabinet, and contain the batteries necessary to store electrical power for night operation of the repeater station. The battery box would be of a size sufficient to accommodate two automobile sized batteries.

If necessary, the dishes, electronic cabinet and battery box will be painted the same or similar color of the tower to mitigate any visual impact thereof.

The proposed site permits a line of sight between the Applicant's operating cellular telephone cell at Kilohana Crater and its proposed cell site at the Princeville Nursery.
While similar in size and function as the passive microwave repeater station previously approved by the Board of Land and Natural Resources at Lawai, the proposed use would be an active repeater station. An active repeater station receives microwave transmissions and amplifies the signals before relaying the same to the next cell.

(b) Economic: The proposed action will cost approximately $60,000. Due to the limited nature of the proposed action, there will not be significant economic benefits resulting therefrom. However, the proposed use will enable the Applicant to provide cellular telephone service to the residents and businesses of the North Shore. Non-dependence on the telephone land lines will also provide another means of communication in times of emergencies and natural disasters.

(c) Social: The proposed use will enable improved communication alternatives for the Kauai North Shore. This will mean better ability for the residents and businesses on the North Shore to telecommunicate while mobile, with its resultant effects such as less time wasted while in traffic, being better able to coordinate meetings, etc.

(d) Environmental: The environmental characteristics of the proposed action are as follows:

(1) Flora and Fauna: There are no endangered or threatened species of flora or fauna at the site of the proposed action. The existing vegetation consists of grasses, guava and java plum trees. A photograph of the subject site is attached as an exhibit to the environmental impact assessment attached hereto as Appendix "A". The proposed action will not require any need to cut or trim an existing vegetation. Grasses may be trampled as workmen hike up to the site from the existing powerline road to attached the proposed facilities to the electrical transmission tower, or to repair the same. However, the trampled grasses should readily grow back so that any effect will be temporary and minimal.

(2) Drainage: As the proposed action is only to affix the cellular relay station to the legs of an existing electrical transmission tower, the proposed action will not affect the drainage pattern of the immediately surrounding area in any fashion. There has been no indication that the drainage pattern has, or will be, affected in any significant manner by the transmission tower.
(3) Erosion: The proposed action will not cause any increase in erosion of the tower site, as the tower already exists and the proposed repeater system will be attached to the tower itself.

(4) Historical and Archaeological: The Applicant is not aware of any historical or archaeological significance to the site. As the site is already used for an electrical transmission tower, any historical or archaeological concerns would have been resolved prior to, or compromised by the construction of the tower.

(5) Visual: The tower upon which the dishes and other facilities will be placed is approximately 60 feet in height, with electrical transmission wires strung from the upper fourth. The proposed 6' sold dishes will be attached approximately 25' above the ground, or about half way up the tower. Attached hereto as Exhibit "1" and made a part hereof is a scaled drawing of the tower with the proposed microwave dishes shown thereon.

Given the relative sizes of the tower and the proposed dishes, the facilities for the proposed use will blend into the tower. Painting the dishes a grey or color similar to that of the tower will further cause the proposed facilities to blend into the background.

Further, the tower is miles away from the nearest highway, and the facilities from the proposed use would not be visible due to its relatively small size and the distance from which they would be seen.

(5) Summary Description of the Affected Environment: The tower which is the subject of this application is located on real property more particularly identified as Kauai Tax Map Key: 5-4-01, por. 01. A tax key map, indicating the location of the tower is attached hereto as Exhibit "2" and made a part hereof.

A site map, to better locate the subject area in relation to the rest of the island of Kauai, is attached hereto as Exhibit "3" and made a part hereof.

As Exhibit "1" indicates, the subject tower is in a remote area, accessible only by helicopter or the power line road used to access the electrical transmission system running between Hanahanaipuni and Hanalei. The subject tower is approximately 6 miles from the Applicant's Kilohana
Crater cell site and 7 miles from the Applicant's proposed cell site in Princeville.

The site was selected due to the need for a line of sight needed between the Applicant's cells at Kilohana Crater and Princeville. The site offers the required line of sight, is sufficiently elevated to avoid interference, and is far removed from existing developments to result in minimal or insignificant environmental impacts.

The tower upon which the proposed microwave dishes and other requisite support facilities will be attached is located along Kauai Electric's transmission line crossing the center of Kauai to the North Shore. Surrounding vegetation and trees were cleared for the construction of the tower and the installation of the electrical transmission lines to and from the tower. Periodic clearing has been done by Kauai Electric to prevent interference with the electric lines from vegetative growth.

The proposed action will not affect the surrounding environment. The previous clearing and periodic trimming of trees and vegetation for the transmission line leaves an open corridor for the line of sight needed for the microwave repeater station, and will thus eliminate the need for any additional clearing or trimming of vegetation.

(6) Identification and summary of major impacts and alternatives considered: Due to its limited scope and size, the proposed active microwave repeater station will not result in any major impacts to the surrounding environment.

Alternatives considered were the construction of an independent tower to house the repeater station, or to do nothing.

The construction of another tower to merely accommodate the needed repeater station was considered non-feasible for a variety of reasons. The time involved and the cost of acquiring the land site and constructing a new tower in such a remote area would be substantial and unreasonable in relation to the benefits derived from the new tower. A new tower would also result in greater environmental impact than using the existing tower.

The Federal Communications Commission mandates that there be 75% coverage of a cellular geographic area within three years. The service area for Kauai is the entire island, and a mid-island repeater station is necessary to
meet this federal mandate. A do-nothing alternative is not feasible, as it would inhibit the Applicant from compliance with the mandate of the FCC.

A do-nothing alternative is also not feasible because of the island’s topography. Due to the mountainous terrain found on the Island of Kauai, a link would be required between the cells at Kilohana Crater and Princeville. Restricting location of the link to the lower coastal areas would necessitate additional repeater sites to make the bend around Kilauea between Anahola and Princeville. Efforts to locate a suitable cell site in the Kilauea region of appropriate elevation and line of sight were not successful.

While the Applicant could lease existing land lines to connect Anahola and Princeville, such an alternative would increase the operational costs to the Applicant and would not provide an alternative telecommunications system in times of emergencies or natural disasters. As the proposed action will not result in any significant adverse environmental or ecological effects, the equities are balanced in favor of the proposed action over the do-nothing alternative in meeting the needs of the federally mandated second cellular telephone system for the Island of Kauai.

(7) **Proposed Mitigation Measures:** While the Applicant does not believe that any mitigation measures are necessary given the remote location of the subject tower, it is willing to paint the dishes the same or similar color of the tower. This will mitigate the visual impact, if any, of the proposed action.

(8) **Determination:** Based on the foregoing, it is recommended that a finding that the proposed action will not result in any significant adverse environmental and ecological impacts be adopted, and that an environmental impact statement not be required of the Applicant for the proposed action.

(9) **Findings and Reasons Supporting Determination:** The proposed action will utilize an existing electrical transmission tower. Any environmental impacts which the tower may have had on the environment is not at issue, as the tower has already been built. The issue is whether the proposed action of attaching two microwave dishes, an electronics cabinet, a solar panel and a battery box unto the lower portions of the tower will have any environmental or ecological effects.
As noted above, the only effect other than visual will be the trampling of grasses leading up to the tower as the dishes and other support facilities are attached. These effects will be minimal and temporary, as the grass will grow back.

The visual impact will be minimal and not adversely significant due to the relative size of the proposed dishes to the height and size of the tower, the placement of the dishes on the lower portion of the tower, and the distance of miles between the tower and the nearest public highway.

(10) **Agencies to be Consulted:** As a recommendation of negative declaration is proposed, no other agency need to be consulted for preparation of an environmental impact statement.

VI. **SUMMARY OF PROPOSED USE**

The subject site is an electrical transmission tower owned and controlled by Citizens Utilities Company, Kauai Electric Division, hereinafter called "Kauai Electric".

The tower is located along Kauai Electric's transmission line between Hanahanapuni and Hanalei, though the center of Kauai. It is approximately halfway between the Applicant's Kilohana Crater cell site and its proposed Princeville cell site.

The real property upon which the tower is located is owned by the State of Hawaii, and was leased to McBryde Sugar Company, Ltd., who in turn subleased the site to Kauai Electric, a division of Citizens Utilities. The Applicant is advised that Kauai Electric has acquired the lease from McBryde Sugar Company, Ltd., and is thus the present lessee.

The Applicant is Cybertel Corporation, an Illinois corporation, who is licensed by the Federal Communications Commission to establish and operate the federally mandated second cellular telephone system within the Kauai rural service area. Cybertel Corporation is also registered to do business in the State of Hawaii, and is further regulated by the State of Hawaii Public Utilities Commission.

Subject to obtaining the necessary governmental approvals, the Applicant has received permission from Kauai Electric to place the proposed active microwave repeater station on the tower. Kauai Electric have authorized the Applicant to submit an application for a CDUA permit for the
proposed work. The letter of authorization from Kauai Electric is attached hereto as Exhibit "4" and made a part hereof.

The proposed action consists of attaching an active microwave repeater station for a cellular telephone system unto the legs of an existing electrical transmission tower. The repeater station will consist of two (2) microwave dishes, an electronics cabinet, a photovoltaic or solar generating unit, and a battery box. Each microwave dish will be a solid dish, approximately 6 feet in diameter.

The dishes will be placed approximately 25 feet above the ground on the 60 foot tower. As the lowest existing electrical lines on the tower are approximately 42 feet above the ground, there would still be adequate spacing between the proposed dishes and the lines for safety reasons.

The electronic cabinet would be affixed to the base of the tower. The cabinet would be approximately 2' by 3' by 1' in depth.

Mounted immediately above the electronic cabinet would be the photovoltaic or solar panel to supply electrical power for the repeater station. The solar panel, measuring approximately 4 feet by 5 feet by 1 3/4 inches in thickness, would be mounted 30 degrees to the horizon.

A battery box would be located below the electronic cabinet, and contain the batteries necessary to store electrical power for night operation of the repeater station. The battery box would be of a size sufficient to accommodate two automobile sized batteries.

As there is already a path for the electrical lines which are clear of trees and other obstructions, there will not be any need for the Applicant to do other trimming or removal of vegetation to satisfy its line of sight requirement between the Kilohana Crater and Princeville cells.

The proposed repeater station is one of the two federally mandated cellular telephone systems for the Kauai rural service area. The Applicant's proposed cellular system will, in addition to the subject repeater station, consists of four cells and a passive microwave repeater station. The four cells are situated at the Garden Island Cablevision site near the Kukuiolono Golf Course (TMK: 2-3-
20-54), Kilohana Crater (TMK: 3-8-02, por. 2), the Anahola Water Tank property (TMK: 4-8-03-23), and the Princeville Nursery site (TMK: 5-3-01, por. 16). The passive microwave repeater station is located on a ridge between Omao and Lawai, and was approved by the Board of Land and Natural Resources in Application No. KA-10/6/89-2326.
INFORMATION REQUIRED FOR ALL USES

I. Description of Parcel

(A) Existing structures and use. There is an existing electrical transmission tower on the subject site, in the location shown on the map attached hereto as Exhibit #5 and made a part hereof. The tower is used by Kauai Electric to support electrical transmission lines to the North Shore.

(B) Existing utilities. There are no existing utilities serving the subject site. The proposed use will not require the installation of any utilities, as the proposed use will be self-contained and receive its power requirements from the solar powered generating unit.

(C) Existing access. Access to the tower is over an unimproved dirt road known as the "power line trail", between Wailua and Hanalei. Once the proposed use is installed, there should be little need to access the site unless for repairs or infrequent maintenance.

(D) Vegetation. Vegetation at the site consists of grasses, as well as guava and java plum trees.

(E) Topography. The tower is situated on a partially cleared area along the Kauai Electric transmission line to the North Shore. While the tower site itself was cleared for the construction and maintenance thereof, the existing drainage pattern was not affected. Moreover, since the proposed use is to attach equipment unto the existing tower itself, the topography and drainage patterns of the tower site should not be a factor in the application.

(F) Shoreline. Not applicable.

(G) Existing covenants, easements, restrictions. The tower is located within an electrical transmission line easement leased by Kauai Electric from McBryde Sugar Company, Ltd. Other than the electrical transmission line easement so leased, the Applicant is not aware of any other covenants, easements or restrictions which have a bearing on the proposed use.

(H) Historic sites affected. The proposed action will not affect any historic or archaeologically significant sites.

II. Activity Proposed, Purpose and Operations Conducted
As indicated previously, the Applicant desires to place an active microwave repeater station on an existing electrical transmission tower owned by Kauai Electric. The proposed repeater station will consist of two 6-feet microwave dishes, attached approximately 25 feet above the ground on the 60 feet tower.

The Applicant will also install a photovoltaic or solar powered generator, an electronics cabinet, and a battery box on the lower portions of the tower to complete the repeater system. The electronics cabinet will contain the electronic equipment to amplify and repeat the microwave signals. The generator and battery box is to provide power and storage capacity for the facilities.

Microwave signals need a line of sight between the transmitters and the receivers. The purpose of the proposed repeater station is to receive, amplify and re-transmit the microwave signals between the Applicant's Kilohana Crater and Princeville cell sites.

Since the proposed use is for a repeater station, i.e., back to back dishes to receive, amplify and re-transmit the signals between two points, there will be virtually no need to access the site once the station is installed and operational. The solar power generating system will eliminate the need to refill fuel tanks, and access will be required only for repairs and infrequent maintenance and inspections.

III. **Commencement Date:** Upon the granting of necessary governmental approvals for the proposed action.

**Completion Date:** Within forty-five (45) days of the commencement of work.

IV. **Type of Use Requested:**

The Applicant is requesting a Conditional Use Permit in the "Resource (R)" Subzone.

The area of the proposed use is less than 100 square feet.

The nearest town is Kapaa.

The Conservation District Subzone is "Resource (R)."
The County of Kauai General Plan Designation is "Open".

V. **Filing Fee:**

The filing fee of $100.00 is enclosed herewith.
INFORMATION REQUIRED FOR CONDITIONAL USE

I. Plans:

A. Area Plan: Exhibit "2" hereto shows the area where the subject tower is situated. The site upon which the tower is situated is vacant. The surrounding area is undeveloped lands and natural vegetation. Given the remote location of the site, it is unlikely that there will any development of the area in many years to come, if at all. The proposed microwave repeater station will not adversely affect such potential future uses of the area.

The names and addresses of abutting property owners, and the tax map keys of their respective parcels, to the best of Applicant’s knowledge, are as follows:

State of Hawaii
Hawaii State Capitol
Honolulu, HI 96813
TMK: (4th) 4-2-01-02
5-3-01-03
5-6-01-01

Princeville Corporation, formerly known as
Princeville Development Corporation
P. O. Box 3040
Princeville, HI 96722
TMK: (4th) 5-3-01-04
5-3-01-02
5-3-01-16

B. P. Bishop Trust Estate
P. O. Box 3466
Honolulu, HI 96801
TMK: (4th) 5-7-01-01

McBryde Sugar Company, Ltd.
P. O. Box 8
Elele, HI 96705
TMK: (4th) 5-8-01-01

B. Site Plan: As the proposed action will be to attach a microwave repeater station to an existing electrical transmission tower, a specific site plan for the tower was not prepared. Exhibit "2" hereto shows the location of the subject property and of the subject tower.
With respect to concerns as to potential future uses of the tower, Kauai Electric has advised the Applicant that Kauai Electric does not have any plans to permit any other parties to use the tower for any other purposes.

C. Construction Plans: The construction will merely consist of attaching two microwave dishes, an electronic cabinet, a solar generating panel, and a battery box to the tower. Exhibit "1" hereto shows how and where the microwave dishes and other facilities will be attached.

D. Maintenance Plans: As the proposed microwave repeater station uses a photovoltaic cell and storage batteries as its source of power, there is no need for scheduled maintenance or refueling. The electronics cabinet is weatherproof, and once operational, the entire station is expected to be entirely self-sufficient and trouble free. Only in the event of a malfunction of the station will it become necessary to gain access to the site. Due to these factors, there is no formal maintenance plan or schedule.

E. Management Plans: As the proposed use will not involve use of animal, plant or mineral resources, no management plan is required.

F. Historical or Archaeological Site Plan: As the proposed use does not have any historical or archaeological significance, no historic or archaeological site plan is required.

II. Subzone Objective:

The subject site is within the "Resource (R)" subzone. The objective of this subzone is to "develop, with proper management, areas to ensure sustained use of the natural resources of those areas."

The proposed use is not inconsistent with the stated objective, as it continues to ensure the sustained use of the natural resources suitable for public utility use with minimal or not environmental effects. The use is compatible with the locality and surrounding areas, and appropriate to the physical conditions and capabilities of the specific parcel of land. The existing physical and environmental aspects of the subject tower and the surrounding area will remain the same, and will not be significantly nor adversely impacted by the proposed use.
November 26, 1990

Cybertel
3220 Kuhio Highway
Lihue, HI 96766

ATTN: Mr. Hollis Crozier

SUBJECT: LETTER OF INTENT

Dear Mr. Crozier:

This is to confirm that Citizens Utilities Company, Kauai Electric Division, intends to enter into a formal agreement allowing Cybertel to attach your microwave facilities on one of our towers in the Hanalei District.

Cybertel is responsible to secure all permits to accomplish same.

Very truly yours,

BOYD T. TOWNSLEY
Vice President

AHM:lr(cybertel.ahm)
Appendix "A"

ENVIRONMENTAL IMPACT ASSESSMENT

FOR

PROPOSED ACTIVE MICROWAVE REPEATER STATION

AT

HANALEI, ISLAND OF KAUAI, STATE OF HAWAII

TAX MAP KEY: 5-4-01, FOR. 01
The following is an environmental impact assessment on a proposed active microwave repeater station, to be attached to an existing electrical transmission tower at Hanalei, Island of Kauai, State of Hawaii, on real property more particularly identified as Kauai Tax Map Key: 5-4-01, por. 01.

(1) Identification of Applicant:
Cybertel Corporation
c/o Walton D. Y. Hong
P. O. Box 1727
Lihue, HI 96766
Tel. 245-4757

(2) Identification of Approving Agency:
Department of Land and Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, HI 96809

(3) Identification of agencies consulted:
Department of Land and Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, HI 96809

Planning Department
County of Kauai
4280 Rice Street
Lihue, HI 96766

(4) General description of action’s characteristics:

(a) Technical: The site will act as an active repeater site for the Applicant’s cellular telephone network to service the North Shore of Kauai. The site will allow the Applicant to receive and transmit strengthened signals between the Applicant’s Kilohana Crater cell and the
Applicant's proposed cell at the present location of the Princeville Nursery.

The proposed repeater station will operate at the 2 gigahertz (GHz) band due to less susceptibility of frequencies in that band and to weather related signal outages.

The proposed action consists of attaching an active microwave repeater station for a cellular telephone system unto the legs of an existing electrical transmission tower. The repeater station will consist of two (2) microwave dishes, an electronics cabinet, a photovoltaic or solar generating unit, and a battery box. Each microwave dish will be a solid dish, approximately 6 feet in diameter.

The dishes will be placed approximately 25 feet above the ground on the 60 foot tower. This level is necessary to clear the height of surrounding vegetation and to prevent ground level interference. While the tower is in a remote location, Kauai Electric personnel visit the site on occasion for inspection, repair and maintenance.

As the lowest existing electrical lines on the tower are approximately 42 feet above the ground, there would still be adequate spacing between the proposed dishes and the lines.

The electronic cabinet would be affixed to the base of the tower. The cabinet would be approximately 2' by 3' by 1' in depth.

Mounted immediately above the electronic cabinet would be the photovoltaic or solar panel, measuring approximately 4 feet by 6 feet by 1 3/4 inches in thickness. This panel would be mounted 35 degrees to the horizon, and would supply electrical power for the repeater station during the daylight hours and charging capacity for the batteries required during night use. Minimal repairs and maintenance of the station would be required due to the trouble-free nature of the photovoltaic panel as a power source.

A battery box would be located below the electronic cabinet, and contain the batteries necessary to store electrical power for night operation of the repeater station. The battery box would be of a size sufficient to accommodate two automobile sized batteries.
If necessary, the dishes, electronic cabinet and battery box will be painted the same or similar color of the tower to mitigate any visual impact thereof.

The proposed site permits a line of sight between the Applicant’s operating cellular telephone cell at Kilohana Crater and its proposed cell site at the Princeville Nursery.

While similar in size and function as the passive microwave repeater station previously approved by the Board of Land and Natural Resources at Lawai, the proposed use would be an active repeater station. An active repeater station receives microwave transmissions and amplifies the signals before relaying the same to the next cell.

(b) Economic: The proposed action will cost approximately $60,000. Due to the limited nature of the proposed action, there will not be significant economic benefits resulting therefrom. However, the proposed use will enable the Applicant to provide cellular telephone service to the residents and businesses of the North Shore. Non-dependence on the telephone land lines will also provide another means of communication in times of emergencies and natural disasters.

(c) Social: The proposed use will enable improved communication alternatives for the Kauai North Shore. This will mean better ability for the residents and businesses on the North Shore to telecommunicate while mobile, with its resultant effects such as less time wasted while in traffic, being better able to coordinate meetings, etc.

(d) Environmental: The environmental characteristics of the proposed action are as follows:

(1) Flora and Fauna: There are no endangered or threatened species of flora or fauna at the site of the proposed action. The existing vegetation consists of grasses, guava and java plum trees. A photograph of the subject site is attached hereto as Exhibit "A". The proposed action will not require any need to cut or trim an existing vegetation. Grasses may be trampled as workmen hike up to the site from the existing powerline road to attached the proposed facilities to the electrical transmission tower, or to repair the same. However, the trampled grasses should readily grow back so that any effect will be temporary and minimal.
(2) Drainage: As the proposed action is only to affix the cellular relay station to the legs of an existing electrical transmission tower, the proposed action will not affect the drainage pattern of the immediately surrounding area in any fashion. There has been no indication that the drainage pattern has, or will be, affected in any significant manner by the transmission tower.

(3) Erosion: The proposed action will not cause any increase in erosion of the tower site, as the tower already exists and the proposed repeater system will be attached to the tower itself.

(4) Historical and Archaeological: The Applicant is not aware of any historical or archaeological significance to the site. As the site is already used for an electrical transmission tower, any historical or archaeological concerns would have been resolved prior to, or compromised by the construction of the tower.

(5) Visual: The tower upon which the dishes and other facilities will be placed is approximately 60 feet in height, with electrical transmission wires strung from the upper fourth. The proposed 6' sold dishes will be attached approximately 25' above the ground, or about half way up the tower. Attached hereto as Exhibit "1" and made a part hereof is a scaled drawing of the tower with the proposed microwave dishes shown thereon.

Given the relative sizes of the tower and the proposed dishes, the facilities for the proposed use will blend into the tower. Painting the dishes a grey or color similar to that of the tower will further cause the proposed facilities to blend into the background.

Further, the tower is miles away from the nearest highway, and the facilities from the proposed use would not be visible due to its relatively small size and the distance from which they would be seen.

(5) Summary Description of the Affected Environment:
The tower which is the subject of this application is located on real property more particularly identified as Kauai Tax Map Key: 5-4-01, por. 01. A site map, indicating the location of the tower is attached hereto as Exhibit "B" and made a part hereof.
As Exhibit "B" indicates, the subject tower is in a remote area, accessible only by helicopter or the power line road used to access the electrical transmission system running between Hanahanapuni and Hanalei. The subject tower is approximately 8 miles from the Applicant's Kilohana Crater cell site and 7 miles from the Applicant's proposed cell site in Princeville.

The site was selected due to the need for a line of sight needed between the Applicant's cells at Kilohana Crater and Princeville. The site offers the required line of sight, is sufficiently elevated to avoid interference, and is far removed from existing developments to result in minimal or insignificant environmental impacts.

The tower upon which the proposed microwave dishes and other requisite support facilities will be attached is located along Kauai Electric's transmission line crossing the center of Kauai to the North Shore. Surrounding vegetation and trees were cleared for the construction of the tower and the installation of the electrical transmission lines to and from the tower. Periodic clearing has been done by Kauai Electric to prevent interference with the electric lines from vegetative growth.

The proposed action will not affect the surrounding environment. The previous clearing and periodic trimming of trees and vegetation for the transmission line leaves an open corridor for the line of sight needed for the microwave repeater station, and will thus eliminate the need for any additional clearing or trimming of vegetation.

(6) Identification and summary of major impacts and alternatives considered: Due to its limited scope and size, the proposed active microwave repeater station will not result in any major impacts to the surrounding environment.

Alternatives considered were the construction of an independent tower to house the repeater station, or to do nothing.

The construction of another tower to merely accommodate the needed repeater station was considered non-feasible for a variety of reasons. The time involved and the cost of acquiring the land site and constructing a new tower in such a remote area would be substantial and unreasonable in relation to the benefits derived from the new tower. A new tower would also result in greater environmental impact than using the existing tower.
The Federal Communications Commission mandates that there be 75% coverage of a cellular geographic area within three years. The service area for Kauai is the entire island, and a mid-island repeater station is necessary to meet this federal mandate. A do-nothing alternative is not feasible, as it would inhibit the Applicant from complying with the mandate of the FCC.

A do-nothing alternative is also not feasible because of the island's topography. Due to the mountainous terrain found on the Island of Kauai, a link would be required between the cells at Kilohana Crater and Princeville. Restricting location of the link to the lower coastal areas would necessitate additional repeater sites to make the bend around Kilauea between Anahola and Princeville. Efforts to locate a suitable cell site in the Kilauea region of appropriate elevation and line of sight were not successful.

While the Applicant could lease existing land lines to connect Anahola and Princeville, such an alternative would increase the operational costs to the Applicant and would not provide an alternative telecommunications system in times of emergencies or natural disasters. As the proposed action will not result in any significant adverse environmental or ecological effects, the equities are balanced in favor of the proposed action over the do-nothing alternative in meeting the needs of the federally mandated second cellular telephone system for the Island of Kauai.

(7) Proposed Mitigation Measures: While the Applicant does not believe that any mitigation measures are necessary given the remote location of the subject tower, it is willing to paint the dishes the same or similar color of the tower. This will mitigate the visual impact, if any, of the proposed action.

(8) Determination: Based on the foregoing, it is recommended that a finding that the proposed action will not result in any significant adverse environmental and ecological impacts be adopted, and that an environmental impact statement not be required of the Applicant for the proposed action.

(9) Findings and Reasons Supporting Determination: The proposed action will utilize an existing electrical transmission tower. Any environmental impacts which the tower may have had on the environment is not at issue, as the tower has already been built. The issue is whether the
proposed action of attaching two microwave dishes, an electronics cabinet, a solar panel and a battery box unto the lower portions of the tower will have any environmental or ecological effects.

As noted above, the only effect other than visual will be the trampling of grasses leading up to the tower as the dishes and other support facilities are attached. These effects will be minimal and temporary, as the grass will grow back.

The visual impact will be minimal and not adversely significant due to the relative size of the proposed dishes to the height and size of the tower, the placement of the dishes on the lower portion of the tower, and the distance of miles between the tower and the nearest public highway.

(10) Agencies to be Consulted: As a recommendation of negative declaration is proposed, no other agency need to be consulted for preparation of an environmental impact statement.