

TECHNICAL EXHIBIT

FACILITY: KHHI-LP, FI 21716
HONOLULU, HI
U.S. TELEVISION, LLC

This application is for a Construction Permit for Ch 36 to replace recently lapsed CP BLANK0000140588. The FCC previously issued a CP on Ch 36, File Number 0000029017 previously determining no problem with the quiet zone. As DKHLU-CD had relinquished their facilities the applicant had displaced to Ch 36 in 2019 and had been issued a CP BLANK0000140588 with identical parameters that had cleared the Quiet Zone. This application uses parameters with reduced ERP and an alternate antenna as the previously granted CP that shows reduced signal in relationship to the quiet zone. (See TVStudy of CP 0000140588 and TVStudy with reduced ERP).

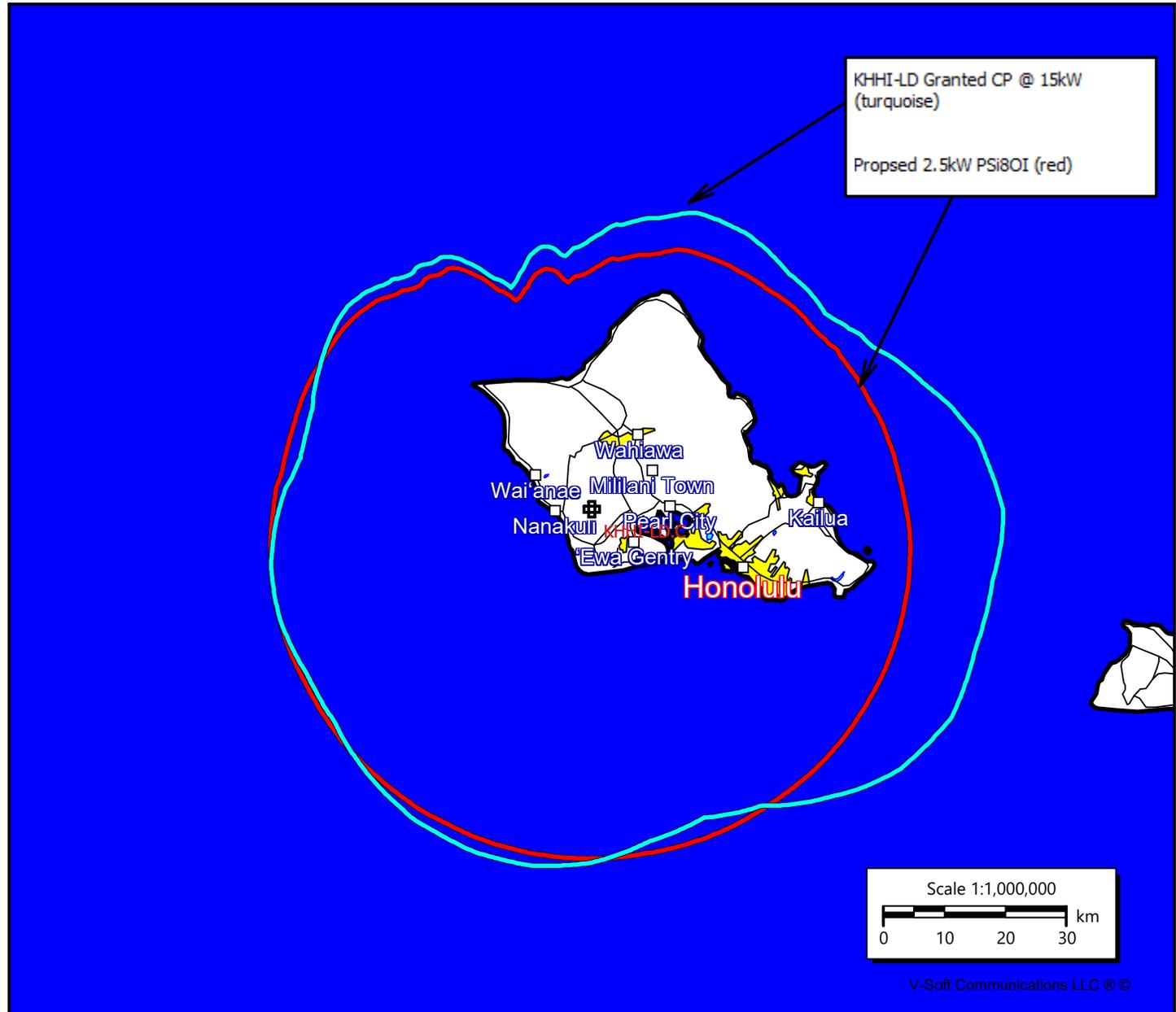
This site is a controlled access site and is inaccessible to the public, The licensee shall also take precautions such as reducing power or shutting down temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive NIER.

Susan Hansen
March 28, 2024

KHHI-LD.C

0000140588
Latitude: 21-23-33.60 N
Longitude: 158-05-48.10 W
ERP: 12.30 kW
Channel: 36N
Frequency: 605.0 MHz
AMSL Height: 705.2 m
Elevation: 695.1 m
Horiz. Pattern: Directional
Vert. Pattern: Yes
Elec Tilt: 0.5
Prop Model: Longley-Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 311.0
Receiver Ht AG: 10.0 m
Receiver Gain: 0 dB
Time Variability: 90.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast

Line of Sight



Study created: 2024.03.28 09:17:38

Study build station data: LMS TV 2024-03-07

Proposal: KHHI-LD D36 LD CP HONOLULU, HI
File number: BLANK0000140588
Facility ID: 52919
Station data: LMS TV 2024-03-07
Record ID: 25076ff3784d7e5e01785a4c49d504b4
Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	KHNL	D35	DT	LIC	HONOLULU, HI	BLANK0000202276	0.7 km
Yes	K36IJ-D	D36	LD	APP	ANAHOLA, ETC., HI	BPDTT20100809CGY	150.3
Yes	K36IJ-D	D36	LD	LIC	ANAHOLA, ETC., HI	BLDTT20100604AAM	150.3
No	K36OZ-D	D36	LD	LIC	HAKAIAU, HI	BLANK0000063072	344.9

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D36
Mask: Stringent
Latitude: 21 23 33.60 N (NAD83)
Longitude: 158 5 48.10 W
Height AMSL: 705.2 m
HAAT: 0.0 m
Peak ERP: 12.3 kW
Antenna: Dielectric-TUM-C1-02/02M-T Custom (ID 1001909) 0.0 deg
Elev Pattrn: Generic
Elec Tilt: 0.50

50.9 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	2.99 kW	240.7 m	43.9 km
45.0	1.67	474.6	50.4
90.0	12.3	647.8	67.5
135.0	6.66	676.1	64.1
180.0	2.76	663.6	58.0
225.0	1.98	673.8	56.1
270.0	0.944	692.8	51.6
315.0	1.34	548.2	51.2

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 577 m

Distance to Canadian border: 4218.8 km

Distance to Mexican border: 4184.1 km

**Proposal is within coordination distance of FCC monitoring station

**Proposal exceeds field strength limit at FCC monitoring station

Conditions at FCC monitoring station: Waipahu HI

Bearing: 100.0 degrees Distance: 10.6 km

ERP: 10.1 kW HAAT: 673.1 m Field strength: 93.2 dBu, 45.7 mV/m

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 54.7 degrees Distance: 5369.6 km

Study cell size: 1.00 km

Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

No IX check failures found.

Study created: 2024.03.28 09:46:01

Study build station data: LMS TV 2024-03-07

Proposal: KHHI-LD D36 LD CP HONOLULU, HI
File number: 2.5kW 80I Fmask
Facility ID: 52919
Station data: User record
Record ID: 464
Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	KHNL	D35	DT	LIC	HONOLULU, HI	BLANK0000202276	0.7 km
Yes	K36IJ-D	D36	LD	APP	ANAHOLA, ETC., HI	BPDTT20100809CGY	150.3
Yes	K36IJ-D	D36	LD	LIC	ANAHOLA, ETC., HI	BLDTT20100604AAM	150.3
No	K36OZ-D	D36	LD	LIC	HAKAIAU, HI	BLANK0000063072	344.9

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D36
Mask: Full Service
Latitude: 21 23 33.60 N (NAD83)
Longitude: 158 5 48.10 W
Height AMSL: 705.2 m
HAAT: 0.0 m
Peak ERP: 2.50 kW
Antenna: PSI-PSILP80I (ID 20499) 180.0 deg
Elev Pattrn: Generic
Elec Tilt: 0.50

50.9 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	1.12 kW	240.7 m	38.7 km
45.0	0.930	474.6	46.8
90.0	1.09	647.8	51.7
135.0	1.98	676.1	56.1
180.0	2.50	663.6	57.4
225.0	1.98	673.8	56.1
270.0	1.09	692.8	52.5
315.0	0.930	548.2	49.0

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Database HAAT: 0 m Computed HAAT: 577 m

Distance to Canadian border: 4218.8 km

Distance to Mexican border: 4184.1 km

**Proposal is within coordination distance of FCC monitoring station

**Proposal exceeds field strength limit at FCC monitoring station

Conditions at FCC monitoring station: Waipahu HI

Bearing: 100.0 degrees Distance: 10.6 km

ERP: 1.26 kW HAAT: 673.1 m Field strength: 84.1 dBu, 16.1 mV/m

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 54.7 degrees Distance: 5369.6 km

Study cell size: 1.00 km

Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

No IX check failures found.