

TECHNICAL EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
TV TRANSLATOR STATION K40FG
LAKE HAVASU CITY, ARIZONA

June 16, 2004

CHANNEL 38 2.34 KW (MAX-DA)

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Technical Statement

This Technical Exhibit was prepared in support of an application for construction permit for TV Translator station K40FG, Lake Havasu City, Arizona (FCC File No. BLTT-20040521AAN / Facility ID 43371). The instant application proposes to change only the transmitting channel from Channel 40 to Channel 38. No other changes are proposed. This change is necessitated by severe interference being caused to K40FG from TV Translator station K40CQ, Laughlin, Nevada (Channel 40).^{*} This application is classified as a minor change pursuant to Section 73.3572(a)(4)(i).

Proposed Facilities

The proposed facility will operate on Channel 38(-) (614-620 MHz) using a Scala, model 4DR-16S directional antenna oriented at 170°True. The maximum ERP will be 2.34 kW at any horizontal or vertical angle. The antenna will be mounted on an existing tower located on Goat Hill, Lake Havasu City, Arizona. The overall height of the antenna structure is 18 m AGL (410 m AMSL). The antenna radiation center height above ground will be 16 m, with a radiation center height above mean sea level of 408 m. The FCC antenna structure registration number is 1225844. There will be no change in the overall height of the existing structure as a result of the instant proposal.

Response to Paragraph 13(a) – TV Broadcast Analog Protection

An allocation study has been conducted pursuant to the provisions of Section 74.705 of the FCC Rules. The proposed facility meets the contour overlap and spacing requirements with respect to all pertinent analog TV broadcast facilities.

Response to Paragraph 13(b) – DTV Station Protection

An allocation study has been conducted pursuant to the provisions of Section 74.706 of the FCC Rules. The proposed facility meets the contour overlap requirements with respect to all pertinent DTV facilities pursuant to Section 74.706 of the FCC Rules.

Response to Paragraph 13(c) – LPTV/TV Translator/Class A TV Protection

An allocation study has been conducted pursuant to the provisions of Section 74.707 of the FCC Rules. The proposed facility meets the contour overlap requirements pursuant to Section 74.707 of the FCC Rules with respect to all pertinent LPTV, TV Translator or Class A TV facilities with the exception of the following:

- K25AL, Lake Havasu City, AZ, Ch. 25 (FCC File No. BPTTL-20010710ACF)
- K39FV, Lake Havasu City, AZ, Ch. 39 (FCC File No. BLTT-20040521AAK)
- NEW, Parker, AZ, Ch. 39 (FCC File No. BNPTTL-20000831AQZ)

Pursuant to Section 74.707(e) of the FCC Rules, a waiver of the interference protection rules is requested to permit the use of the Longley-Rice propagation methodology as

* An interference analysis prepared according to the FCC Office of Engineering and Technology Bulletin No. 69, reveals predicted interference to a population of 2,101 within the predicted K40FG 74 dBu contour, or 36.7% of the 74 dBu contour service population baseline.

provided in OET-69 with respect to the above facilities. As detailed in Figure 2 herein, the proposed facility meets the 0.5% “rounding tolerance” criteria for interference with respect to the above facilities.[†]

Environmental Considerations

With respect to the potential for human exposure to radio frequency (RF) radiation, calculations prepared in accordance with FCC Bulletin OET-65 (Edition 97-01) indicate that the proposal will not result in human exposure to RF radiation at ground level in excess of FCC standards. Power density calculations were conducted at 2-m above ground[‡] based on the following conservative assumptions, with the following results:

Call Sign	Channel	Peak Visual ERP or Average ERP (kW)	Aural ERP (kW)	Relative Field Factor [§]	FCC Limit ^{**} (mW/cm ²)	Percentage of Limit
K40FG	38	2.34	0.23	0.30	0.410	4.4%

As indicated above, the exposure to RF radiation at 2-m above ground level will not exceed 4.4% of the FCC limit for general population / uncontrolled environment exposure. Therefore, the proposal complies with the FCC limits for human exposure to RF radiation and it is categorically excluded from environmental processing. The applicant, in coordination with other users of the transmission facility, shall reduce

[†] In fact, the proposed K40FG facility causes no interference (0) to any of the stations studied.

[‡] The radiation center height above ground is 16 m.

[§] This is a conservative estimate of the relative field factor in the downward direction.

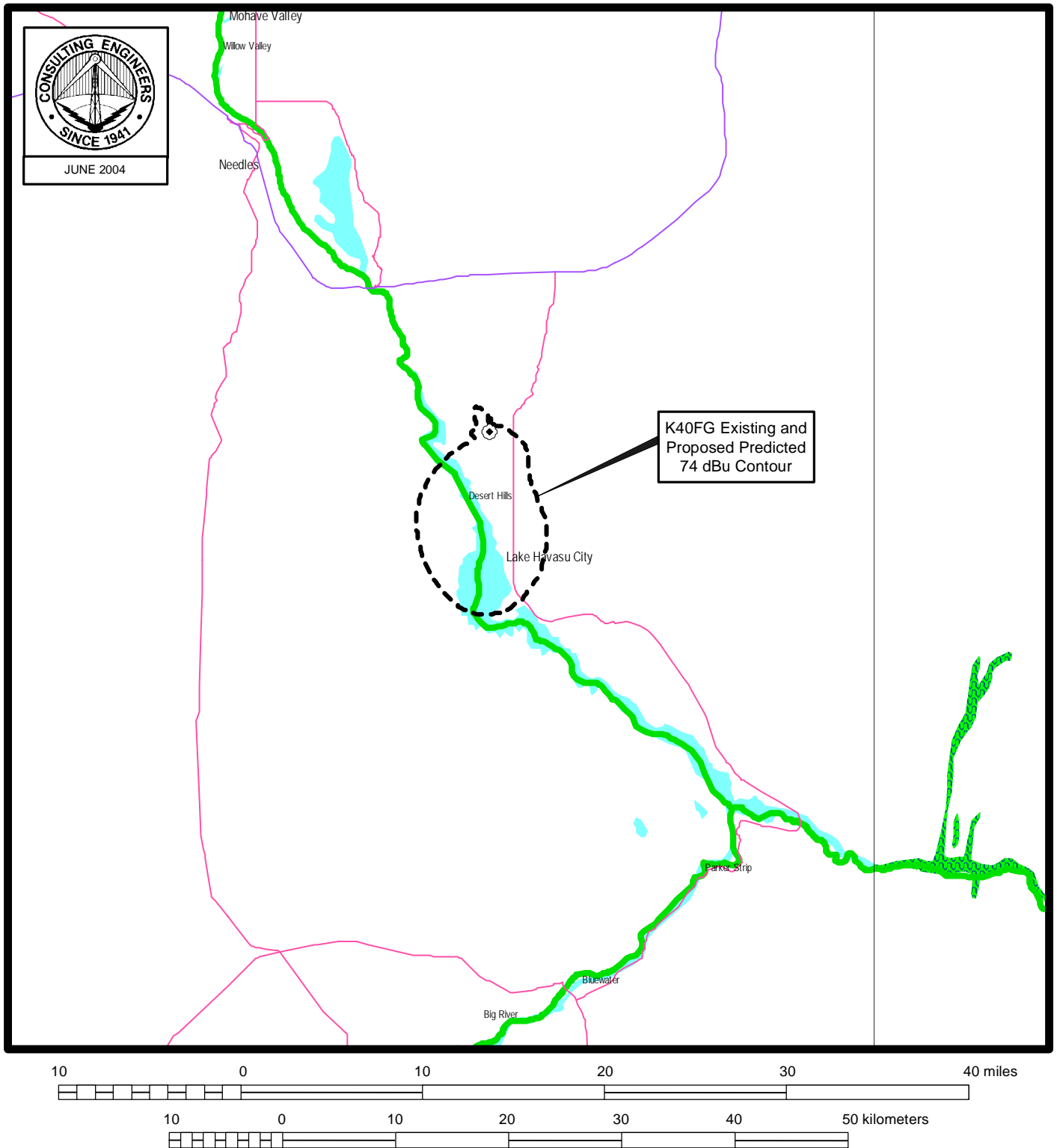
^{**} for general population/uncontrolled environments

power or cease operation as necessary to protect persons having access to the tower or antenna from radio frequency radiation in excess of the FCC guidelines.

Louis Robert du Treil, Jr.

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June 16, 2004



PREDICTED 74 dBu COVERAGE COMPARISON

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du Treil, Lundin & Rackley, Inc. Sarasota, Florida

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Summary of OET-69 Interference Analysis

Stations Potentially Affected by Proposed Station							
Facility Number	Channel	Call	City State	Distance (km)	Status	Application Prefix	Application Reference Number
1	23	K23BJ	LAKE HAVASU CITY	14 . 8	CP	BPTTL	20010301AAO
2	23	K23BJ	LAKE HAVASU CITY	0 . 1	LIC	BLTTL	19891127JR
3	39	K39FV	LAKE HAVASU CITY	0	LIC	BLTT	20040521AAK
4	39	NEW	PARKER AZ	37 . 4	APP	BNPTTL	20000831AQZ

Summary of Interference Analysis for Worst-Case Scenarios							
Facility Number	Interference Population Before Analysis	Interference Population After Analysis	Baseline Population	Net Change in Interference	Percent of Baseline	Permissible Percent of Baseline	Result
1	--	--	--	*	0.00	0.5	pass
2	--	--	--	*	0.00	0.5	pass
3	--	--	--	*	0.00	0.5	pass
4	--	--	--	*	0.00	0.5	pass

* Proposal causes no interference.