

ENGINEERING EXHIBIT

**Application for Construction Permit
for Auxiliary Antenna
prepared for
KLOS-FM Radio, Inc.
KLOS(FM) (Aux) Los Angeles, California
Facility ID 35078
Ch. 238B 50 kW 893 m**

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FCC Form 301, Section III-B

Exhibit 30

Statement A	Nature of the Proposal / Environmental Considerations
Figure 1	60 dB μ Contours of Proposed Auxiliary Facility and KLOS(FM) Main Facility
Figure 2	Proposed Antenna Vertical (Elevation) Plane Pattern

This material supplies a "hard copy" of the engineering portions of this application as entered January 6, 2006 for filing electronically. Since the FCC's electronic filing system may be accessed by anyone with the applicant's name and password, and electronic data may otherwise be altered in an unauthorized fashion, we cannot be responsible for changes made subsequent to our entry of this data and related attachments.

Section III-B - FM Engineering											
TECHNICAL SPECIFICATIONS											
Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.											
TECH BOX											
1. Channel Number: 238											
2. Class (select one): <input type="radio"/> A <input type="radio"/> B1 <input checked="" type="radio"/> B <input type="radio"/> C3 <input type="radio"/> C2 <input type="radio"/> C1 <input type="radio"/> C0 <input type="radio"/> C <input type="radio"/> D											
3. Antenna Location Coordinates: (NAD 27) Latitude: Degrees 34 Minutes 12 Seconds 46 <input checked="" type="radio"/> North <input type="radio"/> South Longitude: Degrees 118 Minutes 3 Seconds 42 <input checked="" type="radio"/> West <input type="radio"/> East											
4. One Step Proposal Allotment Coordinates: (NAD 27) <input checked="" type="checkbox"/> Not Applicable Latitude: Degrees Minutes Seconds <input checked="" type="radio"/> North <input type="radio"/> South Longitude: Degrees Minutes Seconds <input checked="" type="radio"/> West <input type="radio"/> East											
5. Antenna Structure Registration Number: <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Notification filed with FAA											
6. Overall Tower Height Above Ground Level:										60.7meters	
7. Height of Radiation Center Above Mean Sea Level:										1694 meters(H) 1694 meters(V)	
8. Height of Radiation Center Above Ground Level:										40.3meters(H) 40.3meters(V)	
9. Height of Radiation Center Above Average Terrain:										893meters(H) 893meters(V)	
10. Effective Radiated Power:										49.5 kW(H) 49.5 kW(V)	
11. Maximum Effective Radiated Power: <input type="checkbox"/> Not Applicable (Beam-Tilt Antenna ONLY)										50 kW(H) 50 kW(V)	
12. Directional Antenna Relative Field Values: <input checked="" type="checkbox"/> Not applicable (Nondirectional) Rotation (Degrees): <input type="checkbox"/> No Rotation											
Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value
0		10		20		30		40		50	
60		70		80		90		100		110	
120		130		140		150		160		170	
180		190		200		210		220		230	
240		250		260		270		280		290	
300		310		320		330		340		350	
Additional Azimuths											

Relative Field Polar Plot

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

CERTIFICATION

AUXILIARY ANTENNA APPLICANTS ARE NOT REQUIRED TO RESPOND TO ITEMS 13-16. PROCEED TO ITEM 17.

<p>13. Allotment. The proposed facility complies with the allotment requirements of 47 C.F.R. Section 73.203.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 22]</p>
<p>14. Community Coverage. The proposed facility complies with 47 C.F.R. Section 73.315.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 23]</p>
<p>15. Main Studio Location. The proposed main studio location complies with 47 C.F.R. Section 73.1125.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 24]</p>
<p>16. Interference. The proposed facility complies with all of the following applicable rule sections: Check all those that apply:</p> <p>Separation Requirements. <input type="checkbox"/> a) 47 C.F.R. Section 73.207</p> <p>Grandfathered Short-Spaced. <input type="checkbox"/> b) 47 C.F.R. Section 73.213(a) with respect to station(s): [Exhibit 26] Exhibit required <input type="checkbox"/> c) 47 C.F.R. Section 73.213(b) with respect to station(s): [Exhibit 27] Exhibit required <input type="checkbox"/> d) 47 C.F.R. Section 73.213(c) with respect to station(s): [Exhibit 28] Exhibit required.</p> <p>Contour Protection <input type="checkbox"/> e) 47 C.F.R. Section 73.215 with respect to station(s): [Exhibit 29] Exhibit required.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 25]</p>
<p>17. Environmental Protection Act. The proposed facility is excluded from environmental processing under 47. C.F.R. Section 1.1306 (i.e., The facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine compliance through the use of the RF worksheets in Appendix A, an Exhibit is required.</p> <p>By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 30]</p>

PREPARERS CERTIFICATION ON PAGE 3 MUST BE COMPLETED AND SIGNED.

SECTION III - PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name JONATHAN A. SCHULTZ		Relationship to Applicant (e.g., Consulting Engineer) CONSULTANT	
Signature		Date 1/6/2006	
Mailing Address CAVELL, MERTZ & DAVIS, INC. 7839 ASHTON AVENUE			
City MANASSAS	State or Country (if foreign address) VA		Zip Code 20109 -
Telephone Number (include area code) 7033929090	E-Mail Address (if available) JONATHAN.SCHULTZ@CMDCONSULTING.COM		

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

Exhibits

Exhibit 30

Description: EXHIBIT 30 - NATURE OF THE PROPOSAL - ENVIRONMENTAL CONSIDERATIONS

EXHIBIT 30 - NATURE OF THE PROPOSAL - ENVIRONMENTAL CONSIDERATIONS - ATTACHED AS A PDF DOCUMENT

Attachment 30

Description
<u>EXHIBIT 30</u>

Exhibit 30 - Statement A
NATURE OF THE PROPOSAL
ENVIRONMENTAL CONSIDERATIONS
prepared for
KLOS-FM Radio, Inc.
KLOS(FM) (Aux) Los Angeles, California
Facility ID 35078
Ch. 238B 50 kW 893 m

Nature of The Proposal

KLOS-FM Radio, Inc. (“*KLOS*”) proposes herein to construct a new auxiliary antenna facility for KLOS(FM), Ch. 238B, Los Angeles, California. The proposed facility will be mounted on an existing tower structure located atop Mount Harvard, an established communications site. The 60 dB μ contour of the proposed auxiliary facility will be entirely contained within the 60 dB μ contour of the KLOS main facility, in accordance with Section 73.1675(a)(1)(ii) of the Commission’s Rules. The locations of the respective 60 dB μ contours for both the main and proposed auxiliary facilities are depicted in the attached **Exhibit 30 - Figure 1**. The proposed antenna specifies 1 degree of electrical beam tilt with antenna bays spaced at 3/4 wavelength intervals. A plot of the proposed antenna elevation plane radiation pattern is shown in the attached **Exhibit 30 - Figure 2**.

The use of existing transmitter locations has been characterized as being environmentally preferable by the Commission, according to Note 1 of Section 1.1306 of the FCC Rules. It is thus believed that the provisions of Sections 1.1307(a)(1-8) do not apply.

Human Exposure to Radiofrequency Electromagnetic Field

The proposed operation was evaluated for human exposure to radiofrequency (“RF”) electromagnetic field using the procedures outlined in the Commission’s OET Bulletin No. 65 (“OET 65”). OET 65 describes a means of determining whether a proposed facility exceeds the radiofrequency exposure guidelines adopted in §1.1310. Under present Commission policy, a facility may be presumed to comply with the limits specified in §1.1310 if it satisfies the exposure criteria set forth in OET 65. Based upon that methodology, and as demonstrated in the following, the proposed transmitting system will comply with the cited adopted guidelines.

Exhibit 30 - Statement A
ENVIRONMENTAL CONSIDERATIONS

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KLOS proposes to install a new transmitting antenna, a Dielectric model DCRM4CFE75T1P, such that its center of radiation is 40.3 meters above ground level. An effective radiated power of 50 kilowatts, horizontally and vertically polarized, will be employed.

The proposed KLOS auxiliary antenna will be located atop Mt. Harvard, an established communications site that is also employed by many broadcast facilities. According to information provided by technical representatives of the applicant, access to the Mt. Harvard communications site is restricted by means of a series of locked chain link fences that prevent public access to the transmitter site. Thus, **the applicant considers the entire Mt. Harvard communications site an “occupational/controlled” exposure area.** The “occupational/controlled” limit specified in §1.1310 for the FM broadcast service is 1000 $\mu\text{W}/\text{cm}^2$. RF plane wave power density is predicted pursuant to OET Bulletin 65, equation (9):

$$S = [(33.4098) (F^2) (ERP)] / D^2$$

Where:

S	=	RF power density in microwatts/cm ²
ERP	=	total ERP in Watts
F	=	relative field factor
D	=	distance in meters

Calculations¹ were made based on the actual vertical plane pattern of the Dielectric antenna (see **Exhibit 30 - Figure 2**). These calculations, which considered changes in ground elevation inside and around the Mt. Harvard communications site, were made at 0.3048-meter (one-foot) intervals outwards from the base of the KLOS auxiliary antenna tower to a distance of 91 meters (300 feet), then at 0.6096-meter (two-foot) intervals to a distance of 183 meters (600 feet), then at 3.048-meter (ten-foot) intervals to a distance of 914 meters (3,000 feet). The results of these calculations showed that the KLOS auxiliary facility’s maximum contribution to power density at two meters above ground level *within the occupational/controlled area* is 44.1 $\mu\text{W}/\text{cm}^2$, or 4.41 percent of the occupational/controlled exposure limit. In all publicly accessible areas near the

¹Available upon request.

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ENVIRONMENTAL CONSIDERATIONS

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Mt. Harvard communications site, the contribution to power density is less than five percent of the general population / uncontrolled exposure limit.

§1.1307(b)(3) states that facilities at locations with multiple transmitters (such as the case at hand) are categorically excluded from responsibility for taking any corrective action in the areas where their contribution is less than five percent. Since the instant situation meets the five percent exclusion test at all ground level areas, the impact of any other facilities near this site may be considered independently from this proposal. Accordingly, it is believed that the impact of the proposed KLOS(FM) auxiliary facility should not be considered to be a factor at or near ground level as defined under §1.1307(b).

Safety of Tower Workers and the General Public

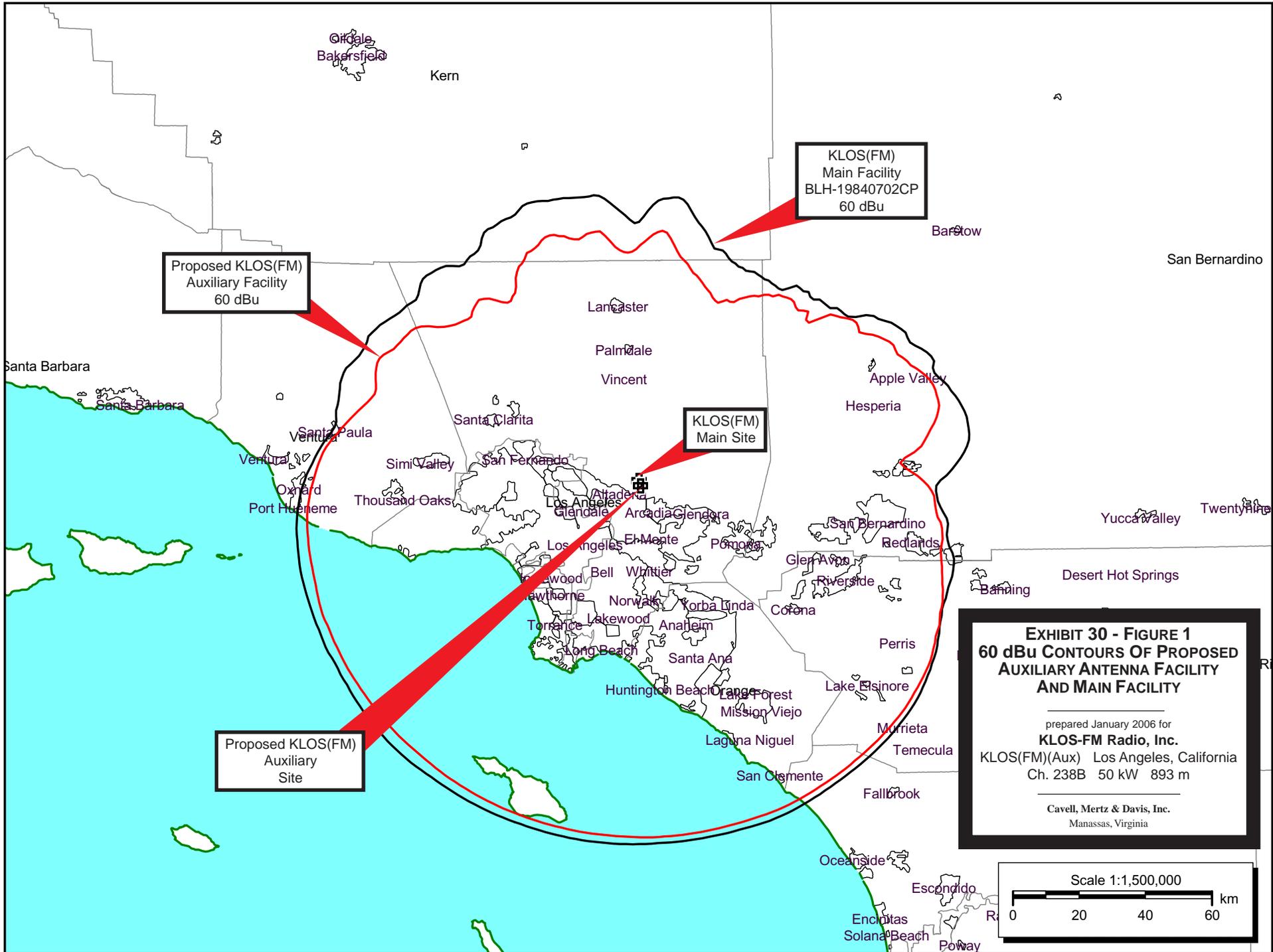
As demonstrated herein, excessive levels of RF energy attributable to the proposal will not be caused at publicly accessible areas at ground level outside the “occupational/controlled” area. Consequently, members of the general public will not be exposed to RF levels in excess of the Commission’s guidelines. Nevertheless, tower access will continue to be restricted and controlled through the use of locked fences. Additionally, appropriate RF exposure warning signs will continue to be posted.

With respect to worker safety, it is believed that based on the preceding analysis, that excessive exposure would not occur in areas at ground level. A site exposure policy will be employed protecting maintenance workers from excessive exposure when work must be performed on the tower in areas where high RF levels may be present. Such protective measures may include, but will not be limited to, restriction of access to areas where levels in excess of the guidelines may be expected, power reduction, or the complete shutdown of facilities when work or inspections must be performed in areas where the exposure guidelines will be exceeded. On-site RF exposure measurements may also be undertaken to establish the bounds of safe working areas. The applicant will coordinate exposure procedures with all pertinent stations.

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ENVIRONMENTAL CONSIDERATIONS
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Conclusion

Based on the preceding, it is believed that the instant proposal is in compliance with 1.1307(b) of the Rules. Hence preparation of an Environmental Assessment is not required.



Proposed KLOS(FM)
Auxiliary Facility
60 dBu

KLOS(FM)
Main Facility
BLH-19840702CP
60 dBu

KLOS(FM)
Main Site

Proposed KLOS(FM)
Auxiliary
Site

EXHIBIT 30 - FIGURE 1
60 dBu CONTOURS OF PROPOSED
AUXILIARY ANTENNA FACILITY
AND MAIN FACILITY

prepared January 2006 for
KLOS-FM Radio, Inc.
 KLOS(FM)(Aux) Los Angeles, California
 Ch. 238B 50 kW 893 m

Cavell, Mertz & Davis, Inc.
 Manassas, Virginia

