

ENGINEERING EXHIBIT

Application for Digital Flash-Cut Construction Permit

prepared for

Bluestone License Holdings Inc.

KTXE-LP San Angelo, TX

Facility ID 309

Ch. 38 (digital) 2.4 kW

Bluestone License Holdings Inc. (“*Bluestone*”) is the licensee of Low Power Television station KTXE-LP, analog Channel 38, San Angelo, TX, Facility ID 309 (BLTTL-20030328ARD). *Bluestone* herein proposes herein to flash-cut to digital operation on Channel 38.

The proposed facility will operate on Channel 38 using a “stringent” out of channel emission mask. **Figure 1** depicts the 51 dBμ coverage contours of the proposed facility, as well as that of the KTXE-LP licensed analog Channel 38 facility. The use of the same transmitter site and the service area overlap shown demonstrates compliance with §73.3572 for a minor change.

The proposed antenna is the existing Andrew omnidirectional model AL8-38 employed by the licensed KTXE-LP facility. The antenna is side-mounted on an existing antenna supporting structure, having FCC Antenna Structure Registration (“ASR”) number 1041536. No change to the overall structure height is proposed.

A detailed interference study per OET Bulletin 69¹ shows that the proposal complies with the Commission’s interference protection requirements toward all DTV, television translator, LPTV, and Class A stations. The results, summarized in **Table 1**, show that any new interference does not

¹FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 (“OET-69”). The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein. A cell size of 1 km was employed. Comparisons of various results of this computer program (run on a Sun Sparc processor) to the Commission’s implementation of OET-69 show excellent correlation.

exceed the Commission's interference limits (0.5 percent to full power and Class A stations, and 2.0 percent to secondary stations).

The nearest FCC monitoring station is 513 km distant at Kingsville, TX. This exceeds by a large margin the threshold minimum distance specified in §73.1030(c)(3) that would suggest consideration of the monitoring station. The site is not located within the areas requiring coordination with "quiet" zones specified in §73.1030(a) and (b). There are no nondirectional AM stations within 0.8 km and no directional AM stations within 3.2 kilometers of the site, based on information contained within the Commission's database. The site is 211 km from the US-Mexican border, therefore international coordination with Mexico will be necessary.

Human Exposure to Radiofrequency Electromagnetic Field (Environmental)

The proposal will involve use of an existing transmitting antenna. The use of existing transmitting locations has been characterized as being environmentally preferable by the Commission, according to Note 1 of §1.1306 of the FCC Rules. No tower construction or change in structure height is proposed. Therefore, it is believed that this application may be categorically excluded from environmental processing pursuant to §1.1306 of the Commission's rules.

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission's OET Bulletin Number 65. Based on OET-65 equation (10), and assuming the worst-case 100 percent antenna relative field in downward elevations, the calculated signal density near the tower at two meters above ground level attributable to the proposed facility is $5.9 \mu\text{W}/\text{cm}^2$, which is 1.4 percent of the general population/uncontrolled maximum permitted exposure limit. This is below the five percent threshold limit described in §1.1307(b) regarding sites with multiple emitters, categorically excluding the applicant from responsibility for taking any corrective action in the areas where the proposal's contribution is less than five percent. When the antenna's vertical plane pattern is considered, the calculated signal density will be even lower.

The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs will continue to be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from RF electromagnetic field exposure in excess of FCC guidelines.

Certification

The undersigned hereby certifies that the foregoing statement and associated attachments were prepared by him or under his direction, and that they are true and correct to the best of his knowledge and belief.



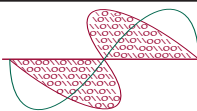
Joseph M. Davis, P.E.
July 24, 2009

Chesapeake RF Consultants, LLC
11993 Kahns Road
Manassas, VA 20112
703-650-9600

List of Attachments

Figure 1	Coverage Contour Comparison
Table 1	Interference Analysis Results Summary
Form 346	Saved Version of Engineering Sections from FCC Form at Time of Upload

This material was entered July 24, 2009 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.



Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

Figure 1
Coverage Contour Comparison
KTXE-LP San Angelo, TX
Facility ID 309
Ch. 38 (digital) 2.4 kW

prepared for
Bluestone License Holdings Inc.

July, 2009

Licensed KTXE-LP
Analog Ch. 38
74 dBu Contour

Proposed KTXE-LP
Digital Flash-Cut
51 dBu Contour

Tom Green

San Angelo

Winters

Sterling

Sterling City

Coke

Robert Lee

Bronte

Runnels

Balling

Miles

Irion

Mertzon

Concho

Eden

McCulloch

Brad

Schleicher

Eldorado

Menard

Scale 1:750,000

0 10 20 30 km

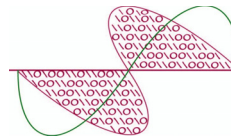
Table 1

Interference Analysis Results Summary

prepared for

Bluestone License Holdings Inc.

KTXE-LP San Angelo, TX



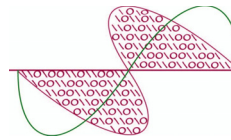
Chesapeake RF Consultants, LLC

Radiofrequency Consulting Engineers
Digital Television and Radio

Ch.	Call	City/State	Dist	Status	Application Ref. No.	---Population (2000 Census)---	
			(km)			Baseline	New Interference
23	K23IA	SAN ANGELO TX	4.4	LIC	BLTTL-20090504AAM	---	none
31	KLMH-LP	ABILENE TX	126.5	LIC	BLTTL-20080124AEU	---	none
31	KEUS-LP	SAN ANGELO TX	2.3	LIC	BLTTL-19990727JE	---	none
34	NEW	ABILENE TX	122.9	APP	BNPTTL-20000810AAH	---	none
34	NEW	ABILENE TX	113.4	APP	BNPTTL-20000818ABC	---	none
34	NEW	ABILENE TX	127.9	APP	BNPTTL-20000802ACZ	---	none
34	NEW	BROWNWOOD TX	140.0	APP	BNPTTL-20000830BMM	---	none
34	K34HW	MASON TX	133.9	LIC	BLTTL-20070507AEV	---	none
34	NEW	SAN ANGELO TX	12.9	APP	BNPTTL-20000830BOB	---	none
34	NEW	SAN ANGELO TX	3.3	APP	BNPTTL-20000830AKF	---	none
34	NEW	SAN ANGELO TX	4.3	APP	BNPTTL-20000831CIG	---	none
34	K34HX	SAN ANGELO TX	3.2	CP	BNPTTL-20000829AGR	---	none
35	KIDB-CA	SWEETWATER TX	106.5	LIC	BLTT-19970609JA	---	none
36	K36JM	ABILENE TX	113.4	CP	BNPTTL-20000818ABM	---	none
36	K36HF	TUSCOLA TX	116.8	LIC	BLTTL-20070613ADK	---	none
38	K38FJ	ALTUS OK	365.3	LIC	BLTT-20010306AAU	---	none
38	K38GL	LAWTON OK	384.7	LIC	BLTTA-20031008AAD	---	none
38	K38JE	ABILENE TX	113.4	LIC	BLTTL-20090409ATE	---	none
38	K38IO	DE LEON TX	198.2	LIC	BLTTL-20070507AEU	---	none
38	KEAP-LD	EAGLE PASS TX	305.6	CP	BDCCDTL-20061030ANI	---	none
38	KVFW-LP	FORT WORTH TX	350.7	LIC	BLTTL-20040302AAP	---	none
38	KVFW-LP	FORT WORTH TX	350.7	CP	BDFCDTL-20081205ADK	---	none
38	K38HP	LUBBOCK TX	260.7	LIC	BLTTL-20060104ABK	---	none
38	K38AP	MEMPHIS TX	369.3	APP	BDFCDTT-20090720ABW	---	none
38	K38AP	MEMPHIS, ETC. TX	369.8	LIC	BLTT-19830503IQ	---	none
38	KPBT-TV	ODESSA TX	186.8	CP MOD	BMPEDT-20080813AEN	---	none
38	KVDA	SAN ANTONIO TX	322.1	LIC	BLCDDT-20021015ABQ	---	none
38	K57JK	TULIA TX	359.7	APP	BDISDTT-20090710AGK	---	none
38	KWKO-LP	WACO TX	310.0	LIC	BLTT-20001229AAB	---	none
38	K38KX	WICHITA FALLS TX	313.6	CP	BNPTTL-20000810AAD	---	none
39	K39HX	BRADY TX	114.5	CP	BNPTTL-20000831BQT	---	none
39	NEW	MIDLAND TX	179.4	APP	BDCCDTL-20061003AEY	---	none
39	NEW	SAN ANGELO TX	0.0	APP	BDCCDTL-20061030AHX	---	none
39	KSWR-LP	SWEETWATER TX	111.7	LIC	BLTTL-20050831AAC	---	none

Table 1**Interference Analysis Results Summary**

(page 2 of 2)

**Chesapeake RF Consultants, LLC**Radiofrequency Consulting Engineers
Digital Television and Radio

<u>Ch.</u>	<u>Call</u>	<u>City/State</u>	<u>Dist</u>	<u>Status</u>	<u>Application Ref. No.</u>	<u>---Population (2000 Census)---</u>	
			<u>(km)</u>			<u>Baseline</u>	<u>New Interference</u>
40	KTES-LP	ABILENE TX	112.1	LIC	BLTTL-20000505AAN	---	none
40	KAEM-LP	SAN ANGELO TX	11.9	CP	BNPTTL-20000830BBJ	91,038	0 (0.00%)
41	KANG-CA	SAN ANGELO TX	2.3	LIC	BLTTL-19990727JF	---	none
42	KIDZ-LP	ABILENE TX	126.5	LIC	BLTTA-20041025ABY	---	none
42	NEW	SAN ANGELO TX	2.3	APP	BNPTTL-20000830BAK	---	none
45	NEW	ABILENE TX	113.4	APP	BNPTTL-20000818ABE	---	none
45	NEW	ABILENE TX	120.1	APP	BNPTTL-20000831AHX	---	none
45	K45HW	SAN ANGELO TX	1.8	LIC	BLTTL-20060224ABB	---	none
45	NEW	SWEETWATER TX	111.7	APP	BNPTTL-20000818ADW	---	none
46	KZAB-LP	ABILENE TX	126.5	LIC	BLTTL-20080124AET	---	none
46	K46FO	BIG SPRING TX	122.8	LIC	BLTT-20010312AAM	---	none
46	NEW	SWEETWATER TX	108.7	APP	BNPTTL-20000831EIF	---	none

SECTION III - ENGINEERING DATA (Digital)**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: 38																																																																																																
2.	Translator Input Channel No. :																																																																																																
3.	Primary station proposed to be rebroadcast: <table border="1"><tr><td>Facility Identifier</td><td>Call Sign</td><td>City</td><td>State</td><td>Channel</td></tr></table>	Facility Identifier	Call Sign	City	State	Channel																																																																																											
Facility Identifier	Call Sign	City	State	Channel																																																																																													
4.	Antenna Location Coordinates: (NAD 27) Latitude: Degrees 31 Minutes 29 Seconds 5 <input checked="" type="radio"/> North <input type="radio"/> South Longitude: Degrees 100 Minutes 27 Seconds 26 <input checked="" type="radio"/> West <input type="radio"/> East																																																																																																
5.	Antenna Structure Registration Number: 1041536 <input type="checkbox"/> Not Applicable [Exhibit 10] <input type="checkbox"/> Notification filed with FAA																																																																																																
6.	Antenna Location Site Elevation Above Mean Sea Level: 577 meters																																																																																																
7.	Overall Tower Height Above Ground Level: 128 meters																																																																																																
8.	Height of Radiation Center Above Ground Level: 119 meters																																																																																																
9.	Maximum Effective Radiated Power (ERP): 2.4 kW																																																																																																
10.	Transmitter Output Power: 0.5 kW																																																																																																
11.	a. Transmitting Antenna: Before selecting Directional "Off-the-Shelf", refer to "Search for Antenna Information" under CDBS Public Access (http://fjallfoss.fcc.gov/prod/cdbforms/pubacc/prod/cdb_pa.htm). Make sure that the Standard Pattern is marked Yes and that the relative field values shown match your values. Enter the Manufacturer (Make) and Model exactly as displayed in the Antenna Search. <input checked="" type="radio"/> Nondirectional <input type="radio"/> Directional "Off-the-shelf" <input type="radio"/> Directional composite Manufacturer AND Model AL8-38 OMNIDIRECTIONAL b. Electrical Beam Tilt: 1.75 degrees <input type="checkbox"/> Not Applicable c. Directional Antenna Relative Field Values: <input checked="" type="checkbox"/> N/A (Nondirectional or Directional "Off-the-shelf") Rotation (Degrees): <input type="checkbox"/> No Rotation <table border="1"><thead><tr><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th><th>Degrees</th><th>Value</th></tr></thead><tbody><tr><td>0</td><td></td><td>10</td><td></td><td>20</td><td></td><td>30</td><td></td><td>40</td><td></td><td>50</td><td></td></tr><tr><td>60</td><td></td><td>70</td><td></td><td>80</td><td></td><td>90</td><td></td><td>100</td><td></td><td>110</td><td></td></tr><tr><td>120</td><td></td><td>130</td><td></td><td>140</td><td></td><td>150</td><td></td><td>160</td><td></td><td>170</td><td></td></tr><tr><td>180</td><td></td><td>190</td><td></td><td>200</td><td></td><td>210</td><td></td><td>220</td><td></td><td>230</td><td></td></tr><tr><td>240</td><td></td><td>250</td><td></td><td>260</td><td></td><td>270</td><td></td><td>280</td><td></td><td>290</td><td></td></tr><tr><td>300</td><td></td><td>310</td><td></td><td>320</td><td></td><td>330</td><td></td><td>340</td><td></td><td>350</td><td></td></tr><tr><td colspan="12">Additional Azimuths</td></tr></tbody></table>	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											
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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.	
12.	Out-of-channel Emission Mask: <input type="radio"/> Simple <input checked="" type="radio"/> Stringent
CERTIFICATION	
13.	Interference : The proposed facility complies with all of the following applicable rule sections. 47.C.F.R Sections 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h), 74.794(b) and 73.1030. <input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 11]
14.	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 RF compliance, an Exhibit is required. <input checked="" type="radio"/> Yes <input type="radio"/> No See Explanation in [Exhibit 12] 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.
15.	Channels 52-59. If the proposed channel is within channels 52-59, the applicant certifies compliance with the following requirements, as applicable: <input type="checkbox"/> The applicant is applying for a digital companion channel for which no suitable channel from channel 2-51 is available. <input type="checkbox"/> Pursuant to Section 74.786(d), the applicant has notified, within 30 days of filing this application, all commercial wireless licenses of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees.
16.	Channels 60-69. If the proposed channel is within channels 60-69, the applicant certifies compliance with the following requirements, as applicable: <input type="checkbox"/> Pursuant to Section 74.786(e), the applicant has notified, within 30 days of filing this application, all commercial wireless licenses of the spectrum comprising the proposed TV channel and the first adjacent channels thereto, for which the proposed digital LPTV or TV translator antenna site lies inside the licensed geographic boundaries of the wireless licensees or within 75 miles and 50 miles, respectively, of the geographic boundaries of co-channel and adjacent-channel wireless licensees. <input type="checkbox"/> Pursuant to Section 74.786(e), the applicant proposing operation on channel 63, 64, 68 and 69 ("public safety channels") has secured a coordinated spectrum use agreements(s) with 700 MHz public safety regional planning committee(s) and state administrator(s) of the region(s) and state(s) within which the antenna site of the digital LPTV or TV translator station is proposed to locate, and those adjoining regions and states with boundaries within 75 miles of the proposed station location. <input type="checkbox"/> Pursuant to Section 74.786(e), the applicant for a channel adjacent to channel 63, 64, 68 or 69 has notified, within 30 days of filing this application, the 700 MHz public safety regional planning committee(s) and state administrator(s) of the region and state containing the proposed digital LPTV or TV translator antenna site and regions and states whose geographic boundaries lie within 50 miles of the proposed LPTV or TV translator antenna site.
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 JOSEPH M. DAVIS, P.E.	Relationship to Applicant (e.g., Consulting Engineer) CONSULTING ENGINEER	
Signature	Date 7/24/2009	
Mailing Address CHESAPEAKE RF CONSULTANTS, LLC 11993 KAHNS ROAD		
City MANASSAS	State or Country (if foreign address) VA	Zip Code 20112 -
Telephone Number (include area code) 7036509600	E-Mail Address (if available) JOSEPH.DAVIS@RF-CONSULTANTS.COM	