

***AMENDMENT TO  
APPLICATION FOR CONSTRUCTION PERMIT***

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**FM TRANSLATOR STATION K246CF  
BEAUMONT, TEXAS  
107.7 MHz / 0.001 kW ERP**

**E-STRING WIRELESS, LTD**

**DECEMBER, 2014**

## **AMENDMENT TO APPLICATION FOR CONSTRUCTION PERMIT**

The following engineering statement and attached exhibits have been prepared for **E-String Wireless, Ltd.** ("E-String"), licensee of FM translator station K246CF at Beaumont, Texas, and are in support of their amendment to application for construction permit.<sup>1</sup> This application seeks to amend the current application for construction under FCC File No. BPFT-20140820ACW pending before the Commission. This amendment changes the primary station associated with the translator, and additionally makes a small adjustment in the orientation of the directional antenna proposed for use by the facility.

It is proposed under this amendment that the primary station be changed to KQQK(FM) at Beaumont, Texas.<sup>2</sup> The proposed facility would therefore function as a fill-in translator for KQQK(FM). Exhibit A-1 illustrates the predicted 60 dBu service contour for the proposed translator along with the 60 dBu service contour of KQQK(FM). As this map demonstrates, the translator contour would be wholly contained by the service contour of the proposed primary facility.

The original application demonstrated interference protection via Section 74.1204(d) of the Commission's Rules. Since a change in the primary station to first adjacent KQQK(FM) is proposed under this application, Section 74.1204(e) of the Commission's Rules is applicable. Exhibit A-2 illustrates the 54 dBu F(50,10) interference contour for the proposed facility as determined through the Commission's standard contour methodology.

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<sup>1</sup> The Facility ID for K246CF at Beaumont, Texas is 156318.

<sup>2</sup> The Facility ID for KQQK(FM) at Beaumont, Texas is 19087. KZZB (Facility ID: 40485) was originally specified as the primary station.

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As Exhibit A-2 demonstrates, a portion of the proposed 54 dBu F(50,10) interference contour from K246CF would encompass land within the corporate limits of Beaumont, Texas. Within this portion of Beaumont, indicated by the gray shading within the blue contour, a total resident population of zero persons resides. Exhibit A-3 provides a summary of the population within the predicted 54 dBu interference contour.

Exhibit A-3 demonstrates that there is a total resident population of two persons within the proposed 54 dBu F(50,10) interference contour. This exhibit also demonstrates that these persons all reside within Orange County, Texas. Exhibit A-4 expands the Exhibit A-2 map, and adds additional notations.

As Exhibit A-4 demonstrates, the entire land area of Orange County, Texas is external to the corporate limits of Beaumont, Texas. As a result, the two persons indicated in Exhibit A-3 as being residents within the K246CF 54 dBu F(50,10) contour reside *outside* of Beaumont, Texas. As a result, the proposed facility would not cause interference to any population within Beaumont, the community of license of KQQK(FM).

The amended facility would not constitute a significant environmental impact, and is exempt from environmental processing. The proposed antenna would be added to an existing structure that is registered with the Commission. The addition of the proposed translator antenna to the structure would not increase the existing environmental impact already present from the tower.

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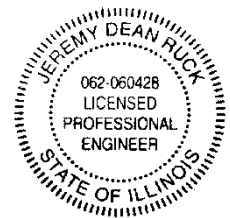
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Additionally, the proposed facility would not result in a radiofrequency radiation exposure hazard to persons at the site. Under a worst-case analysis pursuant to the equations in Appendix A of *OET Bulletin 65*, the calculated power density at two meters above ground is 0.00403  $\mu\text{W}/\text{cm}^2$ . This value is considerably less than the upper limit permissible under the uncontrolled environment condition. This value is also substantially small enough to categorically exclude the facility.

E-String certifies that it will coordinate with all other users of the site to ensure that workers and other personnel are not exposed to levels of radiofrequency radiation in excess of the applicable safety standards. Such coordination will include, but is not necessarily limited to, a reduction in transmitter power, or cessation of operation.

The preceding statement and attached exhibits have been prepared by me, or under my direction, and are true and accurate to the best of my belief and knowledge.



Above signature is digitized copy of actual signature  
License Expires November 30, 2015

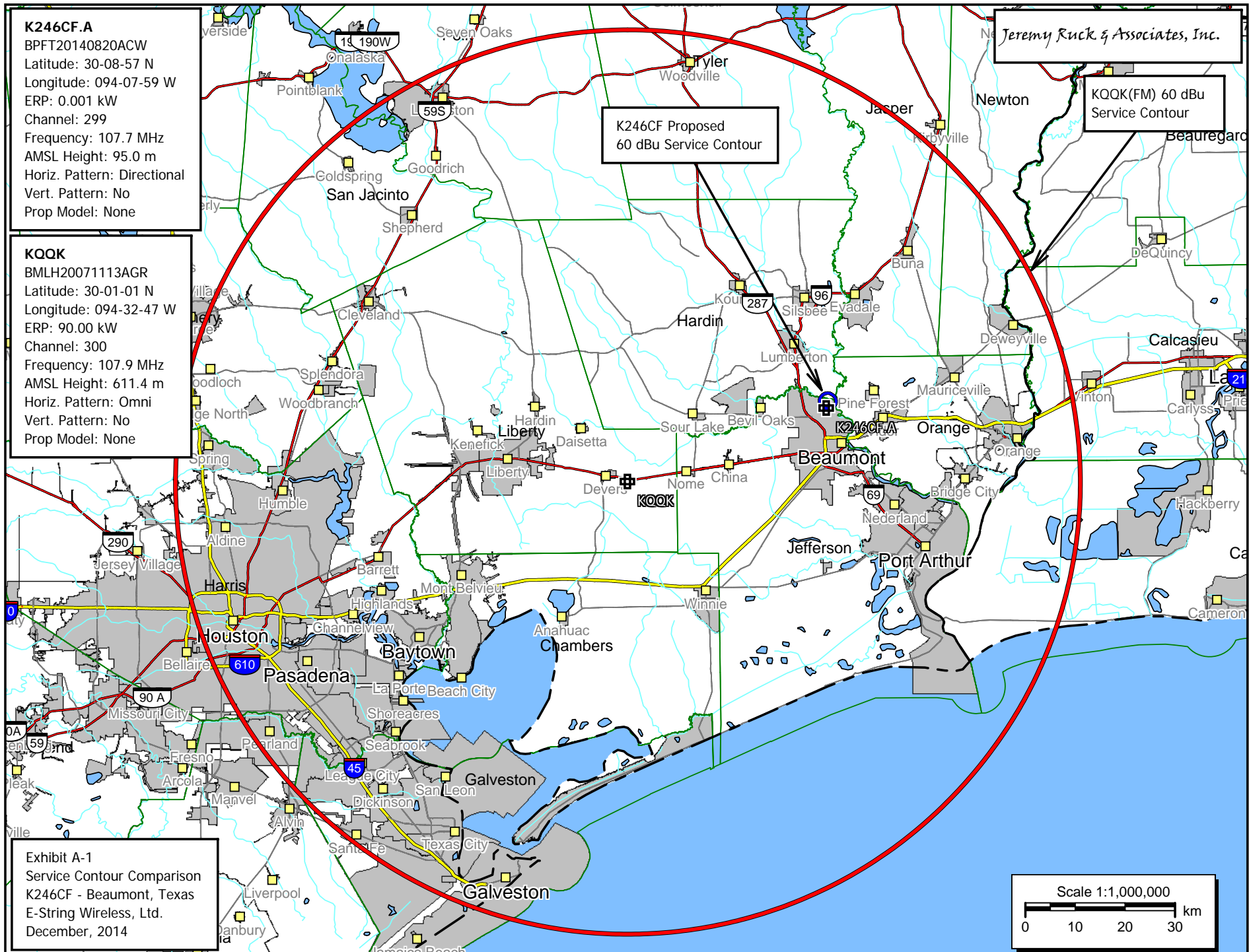
Jeremy D. Ruck, PE  
December 23, 2014

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**K246CF.A**

BPFT20140820ACW  
Latitude: 30-08-57 N  
Longitude: 094-07-59 W  
ERP: 0.001 kW  
Channel: 299  
Frequency: 107.7 MHz  
AMSL Height: 95.0 m  
Elevation: 2.0 m  
Horiz. Pattern: Directional  
Vert. Pattern: No  
Prop Model: None

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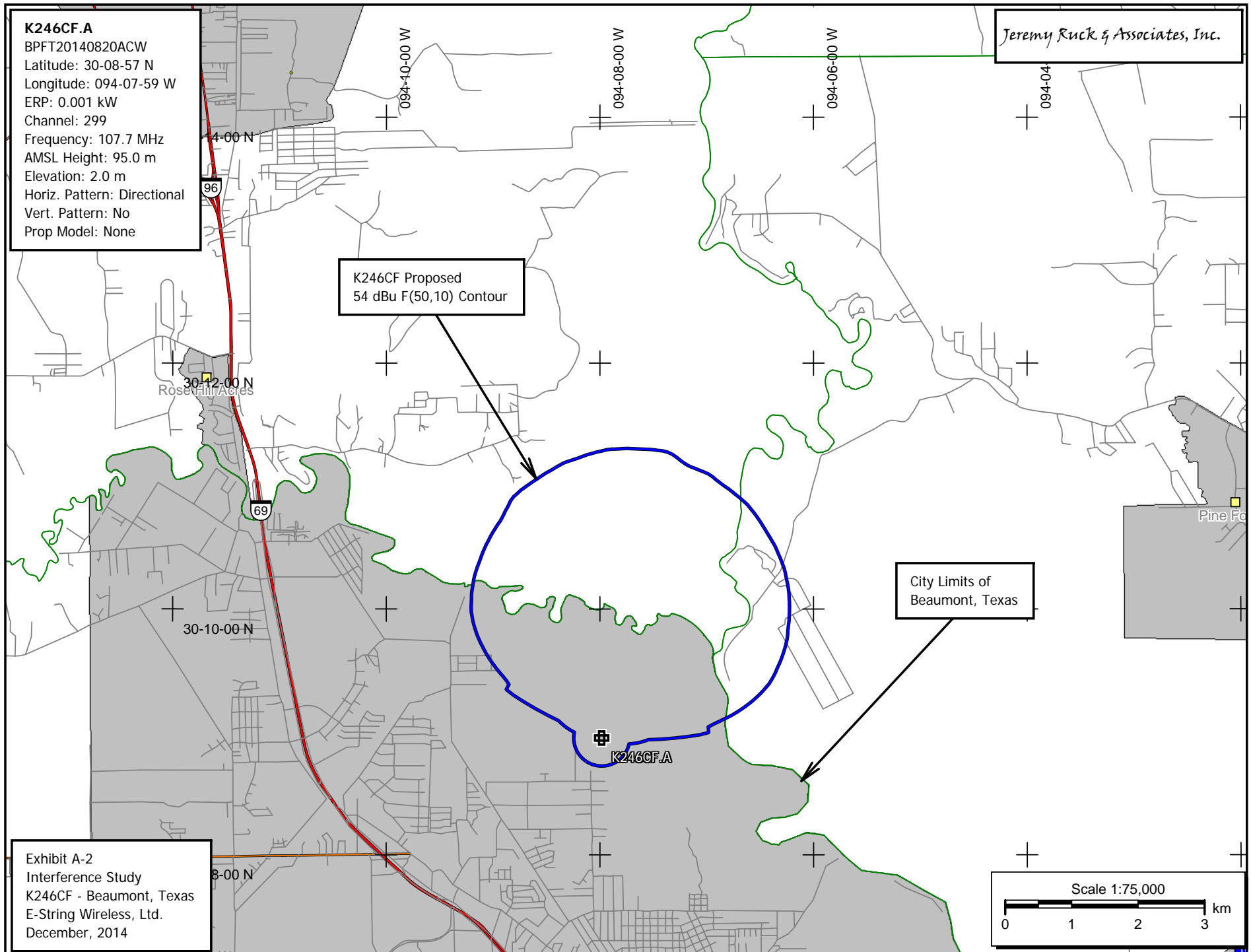
K246CF Proposed  
54 dBu F(50,10) Contour

City Limits of  
Beaumont, Texas

Exhibit A-2  
Interference Study  
K246CF - Beaumont, Texas  
E-String Wireless, Ltd.  
December, 2014

Scale 1:75,000

0 1 2 3 km



## Exhibit A-3 - 54 dBu F(50,10) Population Count

### Population Report

Type of contour: FCC  
Location Variability: 50.0 %  
Time Variability: 10.0 %  
# of Radials Calculated: 360  
FCC Matching HAAT Calculation Used  
Field Strength: 54.00 dBuV/m

Primary Terrain: NED 3 Second US Terrain  
Secondary Terrain: FCC 30 Second US Database  
Population Database: 2010 US Census (PL)

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### Transmitter Information:

Call Letters: K246CF.A  
File Number: BPFT20140820ACW  
Latitude: 30-08-57 N  
Longitude: 094-07-59 W  
ERP: 0.001 kW  
EIRP: 0.0016 kW  
Channel: 299  
Frequency: 107.7 MHz  
AMSL Height: 95.0 m  
Elevation: 2.0 m  
HAAT: 0.0 m  
Horiz. Antenna Pattern: Directional  
Vert. Elevation Pattern: No

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### Population Summary:

Total Population Within Contour: 2  
Housing Units Within Contour: 3  
Total Area Within Contour: 17 sq. km

	Housing Units	Population
Texas		
Hardin County		
Total	22,597	54,635
K246CF.A (299)	0	0
Jefferson County		
Total	104,424	252,273
K246CF.A (299)	0	0
Orange County		
Total	35,313	81,837
K246CF.A (299)	3	2

### JEREMY RUCK & ASSOCIATES, INC.

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A-3

**K246CF.A**

BPFT20140820ACW  
Latitude: 30-08-57 N  
Longitude: 094-07-59 W  
ERP: 0.001 kW  
Channel: 299  
Frequency: 107.7 MHz  
AMSL Height: 95.0 m  
Elevation: 2.0 m  
Horiz. Pattern: Directional  
Vert. Pattern: No  
Prop Model: None

K246CF Proposed  
54 dBu F(50,10) Contour

Persons Reside  
in This Region

Jeremy Ruck & Associates, Inc.

Label Indicating  
Orange County, TX

Boundary of  
Orange County, TX

Orange

Exhibit A-4  
Interference Study  
K246CF - Beaumont, Texas  
E-String Wireless, Ltd.  
December, 2014

Corporate Limits of  
Beaumont, TX Denoted  
by Gray Shading

Scale 1:200,000

